

Responsive system seeks efficiencies



Ongaonga farmer Geoff Hornblow uses monitoring to track farm efficiency

If it were possible to capture a farm system in one word, for Geoff and Dale Hornblow that word would have to be organised.

They lease 444ha near Ongaonga in Central Hawke's Bay and being organised has allowed Geoff and Dale to develop robust, responsive, information-based farm strategies designed to capture efficiencies.

The family took up the lease on the main block (362ha effective) four years ago when sheep returns were rosy. For Geoff the lease was a culmination of a 25-year involvement with the property, owned by members of the wider family.

More recently a smaller block of 40ha (30ha effective) located closer to the village of Ongaonga was also leased. Made up of gravels and relatively free-draining silts, this block adds options for wintering and cropping.

Do not confuse organised with rigid. The target is to winter over 4000 stock units, but flexibility is the name of the game in a region that can be susceptible to the dry.

Capital stock is effectively kept to a minimum and they are expected to perform at high levels of efficiency. Ewes are the only breeding animals on farm, with the balance of the stock made up of Friesian bulls based around a cell grazing system and a small deer finishing operation.

Part of the move toward adopting more flexible stock policies is to reduce labour demands. But the shift in philosophy is also to better match pasture supply and demand.

"It's a juggling act because we keep the farm reasonably well stocked - we're just trying to match the demand to growth," Geoff says.

"There was a time when we used to stack up a mountain of feed in the autumn; the rule of thumb was to have 1800-2000kg DM on the whole farm in the beginning of May - and you'd be alright [for the season].

"But now it's better on the animal's back ... because the wastage on the animal's back is not as quick as if they just trample in a mountain of grass."

The aim is for the most direct route between grass and meat as Geoff prefers not to harvest and feed out supplements.

"The least amount of diesel you put between grass and an animal, the better."

Insurance against a summer feed pinch takes the form of 8-12ha of a green-feed crop, this year of Hunter pasja.

There's no winter cropping with the area going back into either Quartet ryegrass or the early heading Meridian variety.

This season just under 10ha of peas were also planted as a response to high demand in the region.

As well around 3.5ha of maize is going in at the lease block over and above the normal cropping regime, again to cash in on demand and allow drought-damaged pastures to be renewed.

Even though absolute stock numbers have been down as the Hornblows recover from the 2007 drought, when the extra land committed to crops is taken out of the equation stocking rate is more or less at "normal" levels.

Efficiency is the target, and progress is well down the track with the 1800 mixed-age ewes (including two-tooths) put to the ram averaging around 170% scanning and 145% docking.

Accurate and timely data collection plays a central role in the Hornblows' farming system.

Using the Sheep for Profit platform, the sheep are regularly weighed and condition scored.

Ewes are mobbed for most of the year according age, scanning % and sire (terminal or replacement). Each group has it's own designated unit on the farm; Geoff says this allows for easier management as well as more robust data collection.

"We've got slightly different priorities on each of those mobs, each of those areas; you're making your decisions according to what the fate of those lambs might be."

Ewe breed is relatively fluid but dominated by a Romney base.

There is a small East Friesian influence but Geoff is breeding back to Romney to gain an edge in efficiency. They are introducing Finn and Texel genetics into the mix via half Romney, quarter Finn, quarter Texel rams.

The drive to finish more lambs more quickly also contributed to Geoff's decision to shift towards a Finn/Texel/Romney-cross sheep.

The rams were first used in 2006 and Geoff says they have already noticed that the first lot of offspring seemed to be easier to get in lamb as hoggets.

Ewe replacements are bred on-farm, with 500 ewe lambs retained each year.

To speed up the move away from East Friesian genetics replacements were being selected from two-tooths, however that has now changed back to mixed-age ewes.

Geoff has toyed with the idea of selecting from tried and true five-year-olds as a means of creating a solid breed and lifting efficiency. The replacement lambs would be weaned early so the ewes themselves could be on the truck to the meat processor early on in the summer - as soon as the lambs are off.

Only enough ewes to generate the replacements are put to the Romney ram, with the balance put to a terminal sire.

They are also in the process of switching terminal sire breed from Suffolk to Texel.

Geoff likes the look and spirit of the Texel lambs, and has found them to be fast finishers that respond well in a feed pinch.

Rams go out to the mixed-age ewes at the end of March to early April.

Teaser rams are used in the two-tooths before entire rams go out at the same time as the mixed-age ewes. Ram activity is monitored with harnesses; in 2007 just under 90% of the ewes took a ram in the first cycle. Ewes average around 170% scanning, largely excluding triplet identification. Any "obvious" triplets are identified at scanning, but no special effort is made.

With such a high proportion of multiple-carrying ewes, it seemed the whole flock could become a priority mob. Rather than favouring triplet-bearing ewes the system has now changed with age and condition determining priority.

"We've shifted the focus a bit - looking after the twin-bearing ewe is the absolute priority, to the point of compromising cattle feeding in the spring."

In effect, the entire flock has become the priority mob at the expense of other stock classes.

"The deer and cattle all feel the pressure for feed allocation ahead of the ewes because if we don't, the ewe loses her liveweight and we end up weaning early with a light ewe and a light lamb - and we spend the next 150 days trying to unravel all that."

The plan is to wean the lambs with the ewes at close to their tugging weight. They have found it difficult to put weight on to ewes over the summer because of the conditions and the increased competition.

Taking care of the ewes paid off in 2007. Despite the drought, lamb survival remained high at around 145% survival to docking, a factor Geoff puts down to preserving ewe condition.

The regular monitoring undertaken as part of the Sheep for Profit programme means Geoff has his finger on the pulse of the ewe flock; any changes are picked up quickly and management strategies developed accordingly.

Formal feed budgeting complements the animal monitoring policy. Geoff and Dale sit down with PGG Wrightson farm consultants John Walden and Roy Fraser on a regular basis to gauge the farm's feed position.

"It allows us to farm closer to the edge of the minimum cover ... To make money we've got to farm like that; at times it's stressful but at times it's very rewarding.

"It gives us about a three month look out ahead ... with what we're doing it's ideal because you can react to something that's coming, and if it keeps coming you can react faster - and that's proved it's worth in the drought.

"We could see what was happening further out [in Central Hawke's Bay] - we knew it was coming our way - we just accelerated our selling policy. We were out of all our lambs, we were down to winter numbers by tugging date, and we'd banked a lot of liveweight into our ewes."

Keeping with the unit-based management system two-tooths are generally run separately to the mixed-age ewes, except for a six-week period post-scanning. Over this period the flock is rotationally grazed as a single mob. If they show signs of struggling the two-tooths and five-year-old ewes will be drafted off and run separately.

The 2007 drought saw this strategy put into action with the flock split into the two mobs and on a fast rotation over the winter.

Geoff credits timely applications of nitrogen (N) fertiliser in May and July with making the fast rotation work.

"It was a reminder that you can run quite a successful rotation on short covers if the grass is growing; the strength of this farm was that we had N in the system and we lived off that."

The N-fertiliser went on blocks Geoff identified as having good aspect and winter warmth, as well as paddocks the right size to capitalise on the growth.

Most was flown on but he also applied some himself using a spreader towed along behind the four-wheeler. While the cost of the fertiliser has left a bit of a "financial hang-over", stock condition was largely maintained over the difficult period. "We had to do it because we weren't going to buy in feed, and we weren't going to de-stock, and we weren't going to sacrifice the liveweight ... At least we know the stock were looked after and we're well positioned to get that [drought] behind us."

After a pre-lamb crutch the two-tooths are split from the main flock (if not already separate) and the ewes set-stocked back around the farm units.

Set-stocking rates can vary from 9-15/ha for single-bearing ewes and from 7-9/ha for twin- and triplet-bearing ewes.

The rate is guided mostly by paddock aspect and based on what Geoff's experience tells him a paddock can carry.

"You're just fooling yourself if you think you can put, say, 100 ewes in that paddock when you know 80 will be fine and do well. If we want to achieve good lamb growth rates and get lambs off-mum, why set yourself up to fail right from the day you set-stock?"

Ewe hoggets over the minimum weights of 38kg liveweight (LW) for the straight Romney and 37kg LW for the Finn/Texel Romney are mated. Teasers are again used with the breeding rams going out in mid-April.

This year around 250 hoggets went to the ram, with Geoff and Dale docking around 200 lambs.

The rams had been going out to the hoggets for one cycle, but Geoff extended that to 30 days. That policy is once again under review after he noticed that those taking the ram towards the end of the mating period were often the ones that did not get in lamb.

"I think that rather than having a whole lot of little tail-end lambs, if we continue we'll probably compress that mating period down to 20 days."

They are also involved with the Hawke's Bay High Performance Farming Systems group's hogget mating trial, looking at the lifetime impacts of lambing sheep as hoggets.

Lambs sired by the Romney rams are weaned at around 80 days of age, with the terminal-sired lambs weaned about 30 days later - but timing is flexible.

"Weaning dates are not set in concrete; we can wean at anything from eight weeks of age through to 12 weeks of age - it's really a feed and flock decision.

"Our early weaning is often a reaction to the feed levels and where the ewes are at - are they competing or benefiting from each others company?"

Policy has swung away from weaning all the lambs early to try and beat the summer feed pinch to leaving them on the ewes a bit longer to get more drafted off-mum.

"Our aim in any season is to get as many lambs off-mum as we can. As a management tool we have to look after our ewe liveweight ahead of the lamb to a certain extent."

Geoff says getting a proportion of lambs off-mum unlocks the farm.

The relatively high lambing % does impact on the ability to get large numbers of early lambs, hence the split weaning dates and the move towards greater use of terminal sires.

If the numbers are there, they will take a "skim" draft before weaning.

Geoff's target lamb carcassweight (CW) is around 16.5-17.0kg. He believes pushing for higher weights could compromise other stock and says the returns on a cents/kg DM consumed basis would be questionable.

"It's a decision based on feed levels that the farm carries at the time; if we've got plenty of feed instead of weighing down to 34 kg [LW] we might lift the minimum weight to 36 [kg LW].

"It's purely based on response to the feed that's available and where all the classes of stock are at."

The bulk of the lambs are gone before the rams go out.