"Making the DIFFerence"

DEER INDUSTRY FOCUS FARMS PROJECT

AFTER THE FIELD-DAY UPDATE- WELLINGTON FOCUS FARM
11 October 2011

Region: Northern Regions
Date: 11 October 2011
Hosts: Brian & Jacqui Wellington
Facilitator: Mike Woods

The Wellington family farm is looking a picture at present with spring grass growth peaking in the 1st 10 days of October following on from a moderate September. Pasture cover was 1850 kg/ha at the beginning of October, but likely around 2000 kg/ha at the time of the Field-day. Silage is shut for the first crop on 100 ha, to be harvested before the end of October.
With a good growing autumn, feed supply-demand matched as well as could have been expected, to allow good quality grass feeding to meet maximum potential animal performance during the autumn.
However, weaner growth rates achieved in the autumn/early winter were less than we had anticipated, and less than had been achieved in some previous years, when supplementation with silage and/or grain took place because of inadequate grass growth.

Hybrid stag fawns were 4-5 kg lighter at weaning this year due to a dry early summer, and growth rates subsequently have been similar to previous years. Consequently stags available for the 1st cut are down slightly, but current growth rates are good at around 250 grams/day. Stags averaged 75kg 1 September (82kg by 30 Sept) Hinds 72 kg 1 Sept.

The silage area that was established in One50 Perennial ryegrass with AR37, by spray/drill or direct under-sowing is looking very good at this stage. One crop of silage will be cut from the new grass area this year rather than two.

With good prices for all products, the farm is expected to gross just over $1M for the 1st time this year, with a gross margin of $1220/ha or 14.2 cents/kgDM.
Deer will produce 59,472 kg net carcass growth or 99.1 kg/ha according to current Farmax predictions.

Facial Eczema appears to be the main health issue present on the farm, (spore counts dangerous March and particularly April). Parasite resistance is not evident from post

drench egg counts, but still under review, with some abomasal worm counts to be done to confirm.

We have a nutrient budget which indicates 15 kg N/ha (within the "normal farm" range) is leached from the farm, and there is a surplus of P/ha indicating an opportunity to reduce fertilizer inputs on some areas. Composted silage pit waste is contributing one fertilizer application on about half of the silage area, in the autumn.
The wintering of 900 - 1000 hinds in the pines has been shown to be valuable to Brian in so far as the feed budget is concerned, and also allows the best feeding of young stock on grass alone, without damaging vehicle movements daily for feeding out.

Water monitoring has begun from the major catchment outflows from the farm, including the stream flowing out of the pines where the hind wintering occurs. This monitoring indicates significant loss of Phosphorus (soil) and contamination with faecal coliforms in water outflows from the wintering area, and also from other stream outflows, especially when deer are in the catchments at the time of the sampling, and on steeper paddocks containing water "guts" or overland flow channels.
John Paterson (EBOP) is to classify the farm into environmental management areas, and use the farm as an example for a review of the Deer Farmers Landcare Manual.

Getting more fawns weaned and better growth rates from fawns in their 1st year to achieve higher spring slaughter weights is the principle focus of this project.
Three areas in particular show up:

1. The R2 hinds weaning rate has been consistently 20% (15-25% range between years and mobs) below the scanning rate, and repeat scanning has not shown evidence of prenatal foetal loss.
2. In bad Facial Eczema years hind conception rates are down.
3. Fawn growth rates could be higher, particularly pre-weaning, and also post weaning during the 1st autumn/early winter.

We aim to get 15-20 kg more weight on them over these times, and also achieve better than 85% weaning to hinds mated overall.

To this end, we had 2 presentations to the Field-day:

Jake Chardon outlined his thoughts on breeding programs for growth rates when starting from a velvet base of genetics in the hinds.
He was of the strong opinion that separate breeding lines needed to be developed for velvet and venison.
Currently this would result in venison breeding herds containing around 60-80% Eastern genes, and confer up to 5kg extra live-weight at 12 months in the 1st generation, if used widely over the 1st years. He also outlined the Deer Progeny Test project, and indicated that this was necessary groundwork to allow valid comparative information between sire lines for the important carcass traits which are valuable to our customers/consumers. This would result in the development of an economic index for sires.

"More calves, heavier and earlier… and better"

Within about 5-10 years, SNIP chips of sufficient size should be available to enable genomic selection for many of these traits.
There were some questions from the floor around the strength of these high BV growth progeny in face of adversity, and in particular resistance to Facial Eczema. Jake indicated that some of these criteria could be built into the economic index, provided that the traits governing them had sufficient heritability to warrant it. At present Facial Eczema resistance is not included in the Deer Progeny Test criteria.

Geoff Asher presented on achieving higher fawning rates in R2 hinds.
He highlighted that achieving the necessary body weight to achieve puberty in the required time frame is pivotal. This is at least 70% of mature weight, and appears to be advanced further if early life nutrition is optimal.
Re abortions as a cause of reduced calving rate, Geoff described cases investigated by Peter Wilson at Massey where Toxoplasmosis has been linked to pregnancy loss up to 8%. Wilson has previously described Leptospirosis as a cause of foetal loss.
Geoff highlighted that you have to look to see if these causes of low fawning rate are present with repeat scanning in October via the flank.
Minimising losses at or around birth seems to be associated with having hinds settled at fawning, at a lower density set stocking, and a good paddock for birth sites (low cover) and low disturbance.