



NEWSLETTER SPRING 2018

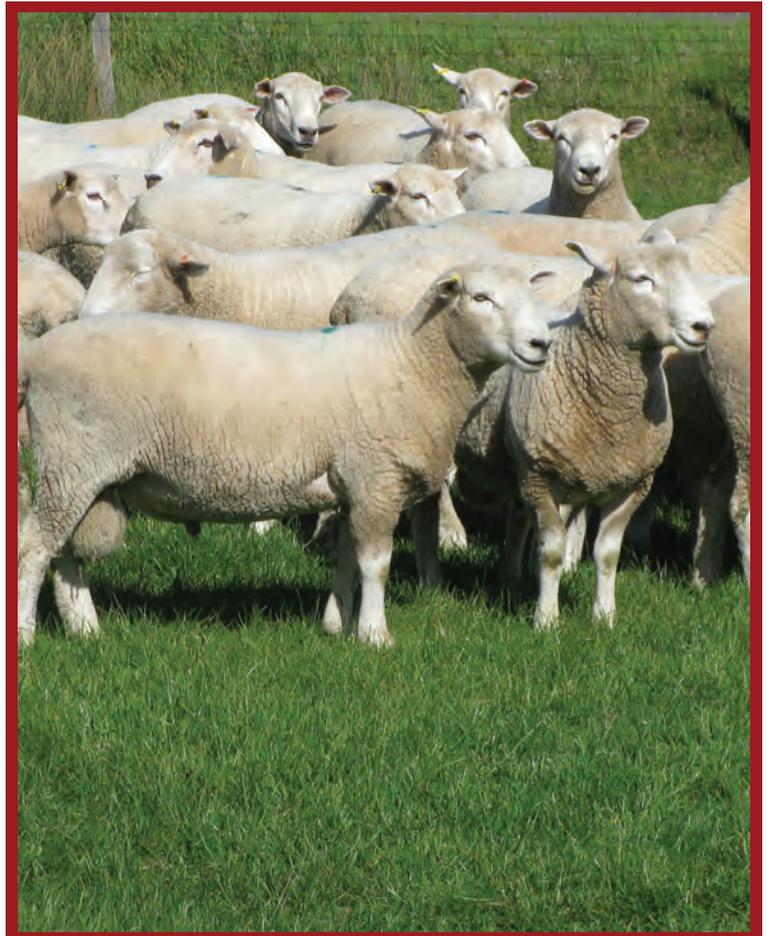
WELCOME | 2018

This past year has seen record lamb prices and there are predictions for the dressed price to reach \$10/kg in the next couple of years. Providing we can continue to produce quality feed and have reliable water on hand the future looks very exciting for the lamb industry.

Our maternal sheep are ideally placed to play an important part in helping producers cash in on this bullish market. Our high fertility and good growth figures are the perfect foundation for a prime lamb flock.

The wool market, on the other hand remains flat, though the wool return is at least paying the cost of shearing. We need to ignore the low wool price and concentrate on the high price of meat and the high fertility which far outweighs a few dollars less in wool cut for crossbred sheep.

I'm pleased with the way our sheep have performed at Palmerston and am also pleased with the type that is evolving, although there is always room for improvement. As with any performance recorded flock or herd, accurate data collection means that any poor performers are weeded out and only productive stock remain, so we are constantly improving our flock.



RED MEAT UPDATES 2018 VIRTUAL FARM TOUR

Red Meat Updates held on July 27 this year was another sell out event, with over 350 industry people attending. Palmerston Coopworths was proud to see our Coopworth ewes showcased in the Virtual Farm Tour, which featured Scott Colvin from Nosswick. The tour of Nosswick highlighted the sheep enterprise productivity gains achieved by Scott and his father Andrew over the last five years as the operation has switched focus from cropping to lamb production (breeding and finishing). Our Coopworths have stood up to increased stocking rates and more intensive grazing management, with their strong feet, worm tolerance, fertility and mothering ability standing them in good stead. If you haven't already seen it the VFT is available on the Red Meat Updates website:

<https://redmeatupdates.com/2018/08/17/2018-virtual-farm-tour-now-online/>

THE MATERNAL INDEX SAGA CONTINUES

In 2016 Sheep Genetics sent out a survey to seed stock producers asking for comment on the old Maternal\$ Index. As with most surveys, not everyone took the time to respond and those that did respond were of the view that adult weight needed to be capped, myself included.

As a result, Sheep Genetics came up with various new indices, one of which, the MCP+ index capped adult weight to zero over ten years. My thoughts at the time were "and about time too". The Kiwis have been penalising high adult weight for years.

Lo and behold, the producers who failed to fill out the initial survey were deeply offended. They wanted to keep selecting for high growth and thus high adult weights and were of the opinion that the slight decrease in fertility and increase in eye muscle weren't in the best interest of the maternal sheep industry. They must have been a noisy bunch because Sheep Genetics resurrected the then scrapped old Maternal\$ Index and re-jigged it from 4.5kg adult weight gain over ten years to 3.9 kg.

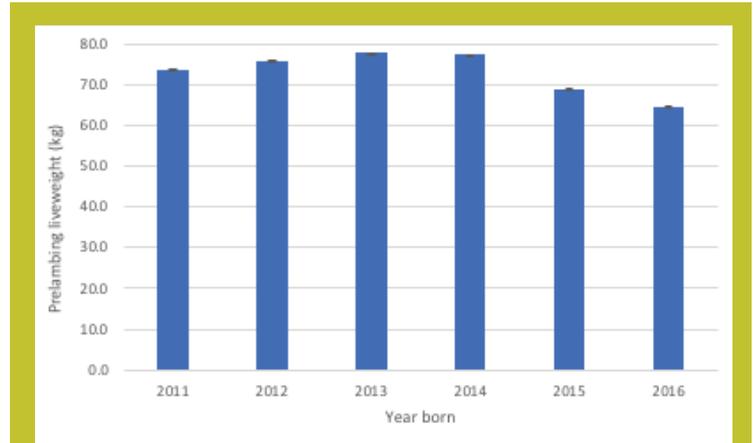
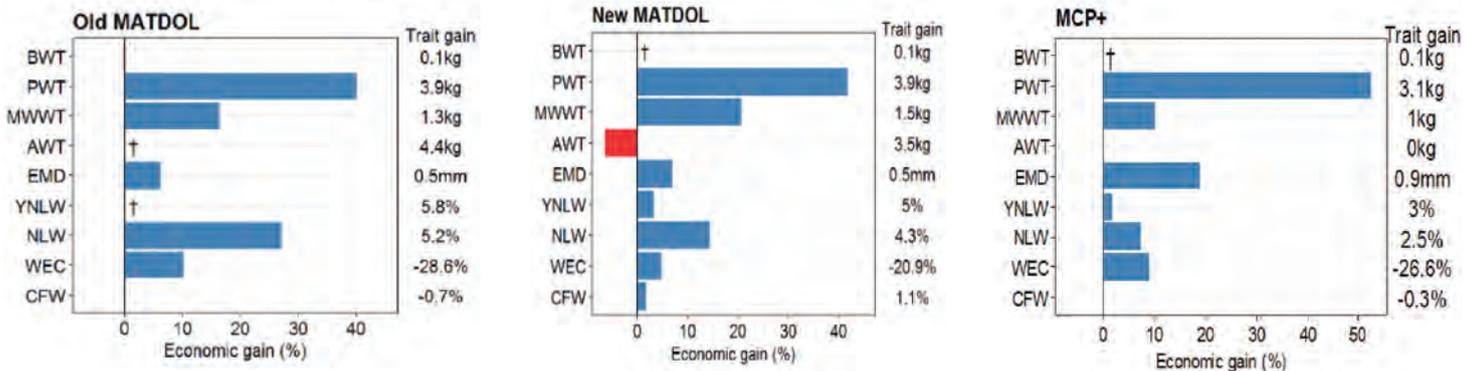


Figure 1: Average pre-lambing liveweight of Palmerston Coopworth stud ewes compared with their year of birth

I'm a firm believer in capping adult weight and consider the MCP+ Index best for us. The graph above shows the trend in adult ewe liveweights at Palmerston. Since 2014 we have been selecting against heavy ewes (>70kg) and our 2016 ewes are an average liveweight of 64.5kg (at pre-lamb weighing).

The ram catalogue will have both the MCP+ Index and the new Maternal\$ Index included. The raw data going into the system is the same. From the figures below potential purchasers of our rams can draw their own conclusions as to which index suits them, or they can do as we do and look at all the figures and the actual sheep and draw their own conclusions.

Figure 2: Predicted genetic changes over 10 years of selection and contribution to economic gain (traits with a † symbol not in index)





What are the effects of ewe size on business performance?

Stocking rate is a key profit driver for livestock businesses, and ewe size has an influence on stocking rate. The bigger the animal the more feed it requires for maintenance, which means that fewer animals can be run.

Table 1 shows MLA DSE stocking rate comparisons for the annual DSE rating for a ewe/lamb unit (this is for the lamb to the point of weaning).

Table 1: Variation in DSE rating with different ewe weights

Ewe weight (kg LW)	50	60	70
Single (DSE rating)	1.5	1.7	2
Twins (DSE rating)	1.7	2	2.2

This information can be used to determine the stocking rate relative to the carrying capacity (measured in DSE). As an example, a property with a 600mm/year rainfall is equivalent to having an 18DSE carrying capacity (assuming a reasonable pasture base). The potential stocking rate of this property for different ewe sizes (based on the DSE ratings in the table above) is outlined in Table 2.

Table 2: Number of ewe lamb units/ha where carrying capacity is 18DSE

Ewe weight (kg LW)	50	60	70
Single bearing ewe lamb stocking rate (units/ha)	12	10.5	9
Twin bearing ewe lamb stocking rate (units/ha)	10.5	9	8

These differences in stocking rate result in some substantial differences in gross margin return, as outlined in Table 3. The lamb revenue assumes a \$30/head gross margin and 80% lamb survival.

Table 3: Gross margin return per ha for ewes of different live weights

Ewe weight (kg LW)	50	60	70
Single bearing ewe	\$290/ha	\$250/ha	\$215/ha
Twin bearing ewe	\$500/ha	\$430/ha	\$385/ha

Excess body condition score

At Palmerston we have had a very straightforward lambing this year, with only two cases of vaginal rupture with evisceration and no prolapse across the commercial and stud flocks and, despite the wet conditions, a low incidence of foot abscess. We believe that this is due, at least in part, to ensuring that the ewes are coming into lambing at an average body condition score of 2.7-3.

In addition to the cost and impact of animal health issues, excess body condition score will affect your bottom line. Work by Macquarie Franklin suggests that every 0.5 condition score above an average annual target of CS 3 results in a lost opportunity of 7% stocking rate, for every 100 ewes. This lost opportunity cost is due to the additional maintenance feed requirement and subsequent poorer feed efficiency and likely exposure to the need for additional supplementary feeding.

While every farm is quite different in terms of lambing percentage, average CS, lambing dates, supplementary feeding and considerations for lamb survival (e.g. time of lambing, pasture covers), we do know that high condition score ewes have a higher maintenance feed requirement and this does not translate to higher returns by having more lambs or greater lamb survival.



BILL'S LAMBING TIPS

Tip #1

Manage condition score post-joining to ensure ewes are not too fat (our target is 2.7 to 3 maximum).

Tip #2

Split larger or odd shaped paddocks up with temporary electric fences to reduce mob sizes. We also use temporary fences to fence off pines and other areas where ewes and lambs congregate and lambs get lost.

Tip #3

To maximise survival of triplet lambs, lighten the stocking rate even more than for twins and lamb down onto your best pastures (> 1800kg DM/ha). This means the ewes don't have to forage excessively – the more they wander about looking for food, the more likely it is for them to lose lambs.



UNDERSTANDING LAMB MORTALITY TRIAL

Palmerston Coopworths is one of 10 businesses taking part in a research project this lambing season to identify when the majority of lamb losses occur between scanning and lamb marking. The project also aims to determine the scale of foetal loss across Tasmanian flocks.

Georgia McCarthy from Macquarie Franklin is running the project, in conjunction with a national study on the same issue by Murdoch University (WA). Georgia is one of 10 recent agricultural graduates across Australia participating in a two-year Future Livestock Consulting Internship with Meat & Livestock Australia (MLA).

The project follows mobs of both maiden and adult ewes from scanning to lamb marking, split into pregnancy type (singles and multiples) and managed separately for lambing. Condition score data was collected at scanning and at pre-lamb drenching along with a lambing paddock

assessment where possible. This included measuring the feed on offer, stocking rate and paddock size, and calculating a shelter and privacy rating.

Mobs were monitored during lambing by the host farmers and lamb and ewe deaths were recorded daily, including the cause of death if identifiable.

During the next few months the data collected from the 10 properties will be analysed to identify any correlations between ewe age, pregnancy type, body condition score and lamb and ewe losses. Recorded data will also be correlated with weather records, observations from producers during lambing and lambing paddock measurements.

The results from the project will be available in early 2019. We'll pop up a blog on the Palmerston Coopworth website with a link once the full trial report is available.