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Great People, Great Cows, Great Returns – Part 2

Welcome to Part 2 of the January edition of the Douglas Green Consulting Ltd newsletter, which is based on the presentation given by American dairy farmer, Lloyd Holterman. In Part 1 we looked at the importance of a strong and motivated team of staff when running a successful dairy business. In Part 2 we look at how to manage the modern dairy cow and how breeding targets and genetics can produce a cow that is more robust, lives longer and produces better quality milk.

Lloyd and Daphne Holterman run 1,100 dairy cows plus followers on their 732ha farm in Wisconsin, USA.

Great People and Great Cows lead to Great Returns!

Lloyd Holterman, Rosy Lane Holsteins LLC, Wisconsin

Management of the modern dairy cow

Lloyd and Daphne found that focusing purely on producing more milk was proving too costly, so the focus switched to improving cow gross margins by achieving a better milk price whilst looking to reduce costs, in particular replacement costs.

In order to achieve this objective their focus turned to cow genetics and how selective breeding could produce a cow that is more robust, lives longer and produces better quality milk.

Having realised there was no profit in classifying, Lloyd took a step back and posed the question 'what does my market require' – breed a cow that produces what your buyer requires. Have a conversation with your milk buyer and build your targets around that.

Breeding Targets at Rosy Lane Holsteins

- Fat
- Protein
- Feed Efficiency
- Mastitis resistance
- Longevity
- Calving Ease
- Moderate foot angle & slightly spread toe
- Beta Kappa Casein*
- Net Merit
- PI – Control fertility issues

*Their milk goes into cheesemaking, so they achieve 10% more income by breeding for this trait

Lloyd presented a useful table to confirm the importance of longevity (see table over the page). Careful management of the cow as she gets older will result in improvements in how much milk you achieve per cow per day of life:

Lactation Number	Milk per Lactation (Litres)	Average Age (Days)	Milk/day of life (Litres)
1st Lactation	10,818	1,055	10.3
2nd Lactation	13,195	1,430	17.2
3rd Lactation	14,010	1,505	21.2
4th Lactation	14,010	2,180	23.8
5th Lactation	12,764	2,520	25.7

Previously, cull rates had run at 36%, but by implementing the strategies above, this has been reduced to 20% involuntary culls and 3% death rate. Going forwards their aim is to reduce this further, to 15% cull rate.

In order to target their key requirements, they have a strict breeding policy, which uses Net Merit to determine what the cow will be served with:

- Net Merit > 900: Flush
- Net Merit 800-900: Use sexed semen (for all services)
- Net Merit 700-800: Use sexed semen for 1st service then Holstein or AA thereafter
- Net Merit 600 – 700: Recipients of embryos
- Net Merit <600: Use AA

Net Merit

Net Merit is a genetic index that simplifies the process of selecting service sires based on their genetic merit for a combination of economically important traits.

Disease Control

Following their objective of reducing costs per cow, the business has focused on disease control and upskilling to reduce overall vet costs. Over the last 10 years vet costs have reduced from 3.2ppl to 1.10ppl and this has been achieved by:

- Training staff to undertake basic vet procedures i.e. PDs, washouts, feet and synchronisations
- Implementing strict biosecurity and disease monitoring. This includes regular testing and prompt action on diseases such as Johnes and BVD (individual cow samples), *Staph Aureus* and mycoplasma (bulk tank testing). Cows found to test positive for any of these diseases are marked and removed from the farm within a week of the positive test
- Breed for disease resistance

Mastitis

Antibiotics are currently used on all cows at drying off as they are not able to use teat sealants due to the contract with their milk buyer. However, new products will soon be available, and their aim is to use these and dramatically reduce the use of antibiotics at drying off.

SCC runs at around 130 and they record 1 clinical mastitis case every 3 weeks. This equates to **2 cases per 100 cows per annum!**

Tri-plate culturing on farm has identified *E coli* and *klebsiella* as the key pathogens; both are environmental pathogens.

Antibiotics are not used for clinical cases, instead the following protocol is implemented within 1-2 hours of clinical signs being noticed:

1. Administer 2 litres of hypertonic saline 7.2% intravenously

2. Administer 18 litres of water drenched and mixed with 2 cups of fresh cow YMCP Powder (yeast, magnesium, calcium, potassium and niacin) plus 2 tablespoons of Celmanax (yeast)
3. 36 litres of water drenched

Steps 1 - 3 are carried out for the next 2 days and if no response is seen the cow is culled.

For severe mastitis: after day 1 of the treatment outlined above, an additional 1 gallon of Polylites (electrolytes) is given intravenously plus a drench of 36 litres of water!

Cure rate: 70%

This treatment has resulted in a better cure rate than had previously been achieved with antibiotics! It should be noted, however, that this cure rate is achieved based on *E.coli* & *Klebsiella* pathogens. **Vet advice should always be sought before treatment is administered.**

Culling policy has a big influence on success as they are not continuing to breed from cows

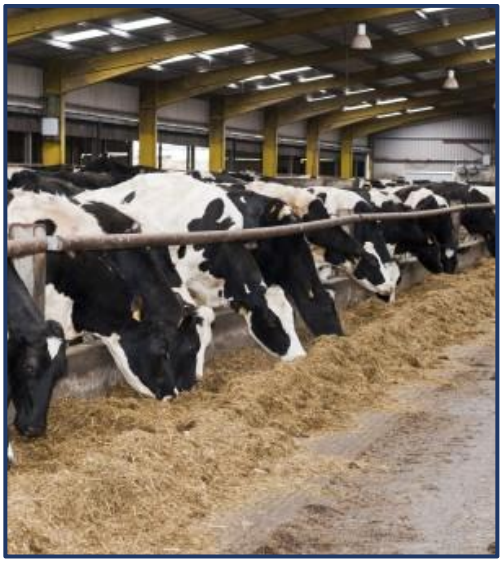
Fertility

Fertility has shown a marked improvement over the last 11 years. The improvement in conception rate is thought to be due to the double ovsynch programme they run. The table on the next page outlines the improvements in the herd:

	2007	2018
Milk/Cow/annum (litres)	12,953	13,757
Services/conception	3.1	1.7
Preg. Rate (%)	18	37
Calves born dead (%)	8.6	3.3
Litres produced/kg feed	1.62	1.67

They assist on average 1 cow/52 calvings and if the calf is presented forwards or backwards, they will leave it for up to 8 hours before intervening. This approach has resulted in fewer dead calves, a reduction in metritis cases and fewer fresh cow issues.

Transition cows



Space is crucial! They ensure that all close up and fresh calved cows have plenty of space in the yards and at feed barriers, so they are not under pressure. In addition to this, freshly calved cows are kept in the transition yard for **no more than 6 hours** before entering the milking herd.

What does this mean for your business?

Lloyd and Daphne have shown that a simple, but focused system can yield excellent results both financially and technically.

When considering the cow and the product you are selling, look at your end market and what they require and tailor your system to suit that. Look to produce a cow that expresses the traits required to meet your business objectives – simply trying to produce more milk is not enough!

Want a structured approach to your business, but not sure where to start?

Taking your system back to basics and setting clear objectives can often help focus the business and highlight how best to grow and improve it long term.

If you would like support on how to de-clutter and focus your farming system, please contact us and one of our consultants would be happy to advise you further.

Call our office on 01666 817278

Or email

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