

drystock

# Good calf care cuts costs

In January, Teagasc, in conjunction with Animal Health Ireland, the dairy processors and supported by Volac, ran a series of on-farm Calf Care events. The series of 18 events took place across the country on dairy and beef farms. Themes covered included breeding, feeding and health for successful calf rearing.

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The events informed farmers of best practice husbandry and management practices to deliver best performance from calves in their care. The main topics discussed were:

- Calf health management.
- Optimal calf housing.

- Pre-weaning nutrition.
- Managing calves for sale.

For both beef, calf to beef and dairy farmers, optimising animal performance is built on the foundation of good calf rearing and having a good healthy calf with excellent weight for age at weaning.

Albert Helen farming outside of Clonakilty, Co Cork, hosted one of the Calf Care events. A mixed farm



comprising of tillage where he grows fodder beet and barley for his own use, with the excess sold off farm, and a calf to beef enterprise where he buys in bull and heifer calves from neighbouring dairy farmers.

At present Albert buys in approximately 20 autumn born and 40 spring born calves. These are predominantly Angus bred with some Belgian Blue, Charolais and Friesian cross animals.

## Insights from the events

### 1. Calf health management

a) Reduce the amount of pathogens that a calf is exposed to.

*Hygiene:* Maintaining strict hygiene standards throughout the calving and calf rearing period is essential. There should be a standard cleaning procedure for all feeding equipment that everyone involved is aware of. Teats on milk feeders should be checked and replaced regularly.

b) Maximise the immunity of the calf *Colostrum:* management of colostrum collection and delivery has to be excellent. Quality colostrum should have a reading of 22% + on a refractor which will indicate an acceptable level of antibodies.

The colostrum 1-2-3 rule is still gospel. Use the colostrum from the



Gordon Peppard, Albert Helen and Teagasc advisor John Humphreys.



Calves need access to fibre to ensure rumen development.

**FIRST** feed, give it within the first **TWO** hours and feed at least **THREE** litres.

Albert is very careful to ensure that all feeders etc are well washed and cleaned down daily to ensure that bacteria get no chance to build up on teat feeders. All calves are sourced from a couple of neighbouring dairy farms and he knows that the calves have received adequate colostrum at birth, which greatly helps to reduce disease outbreaks on his farm.

All calves purchased have travelled only a short distance, minimising stress. They receive their first vaccination against pneumonia on the farm that they were born on a couple of days before moving to Albert's farm.

## 2. Optimal calf housing

The five key requirements for good calf housing are:

### a) Ventilation

Ideally the shed should be oriented so that the length of the shed is at right angles to the prevailing wind. The air outlet should be covered so that no rain can enter. The air inlet should be double the air outlet.

### b) Draught-free

There should be no draughts at calf level, as calves exposed to draughts will lose excessive body heat. Plenty of dry straw should be available and deep enough for calves to nestle into.

Stock boards can be used on pen gates to prevent draughts.

### c) Warm

Optimal air temperature for calves under three weeks of age is 15- 20°C. Lower temperatures will suppress the calves' immune systems.

### d) Dry

Moisture in calf houses must be minimised. Concrete floors should have a one in 20 slope from the back to the front of the pen for good drainage, with drains at the front to take any seepage away. No rain should enter the calf shed.

### e) Clean and cleanable

Before the calf rearing phase, sheds should be thoroughly cleaned out, power washed, disinfected and left to dry out fully before calf rearing begins.

Albert aims to make optimum use of his facilities. A lean-to shed has three separate pens which can accommodate up to 40 to 45 calves.

"I don't like to overstock the shed in the spring," says Albert. "So to maximise calves reared and minimise disease risk, I buy 20 to 25 calves in the autumn."

Sheds are cleaned out well in advance of calf rearing and again between the spring and autumn batches.

## 3. Pre-weaning nutrition

The aim at weaning is to ensure that the calf's rumen is well developed.

That means it will be able to adapt to a change in diet when turned out to grass without any set back in performance or health status.

To ensure a well-developed rumen, calves should be fed a good quality milk replacer, a fibre source (ideally straw), starter concentrate and clean fresh water.

The development of the rumen depends on bacterial fermentation of the concentrate.

For this fermentation to occur, the bacteria need water. Butyric acid is formed, papillae grow and thicken in the rumen, which in turn allows for maximum absorption of nutrients. Calves need approximately five litres of water per kilo of concentrates fed.

Albert's target is to have calves reach 95kg to 100kg at weaning. To ensure this, calves are well fed with milk replacer and straw. All calves should be eating a minimum of one and half kilos of concentrate when weaned.

## 4. Managing calves for sale

Most dairy farmers will breed their replacement heifers from the best cows or heifers on the farm. Once they have achieved the required number of replacements the remaining cows are generally bred to a beef bred bull. These calves are sold on to dedicated calf to beef farms.

Dairy farmers require beef bulls with a short gestation length and also ease of calving.

With the development of Dairy Beef Index they can now select high quality beef bulls to meet these two key requirements but who also have good beef traits to produce high quality beef cross calves.

The Commercial Beef Value is a relatively new tool for beef farmers to identify these higher beef merit calves.

## Conclusions

Albert has built good relationships with neighbouring dairy farmers so he knows how well animals are looked after in terms of colostrum management, vaccination protocols, disease status of the farms etc. "I am able to get the calves I need from these farms," says Albert.

"In future I hope to be able to work with these farmers to select AI straws from dairy beef type bulls to allow ease of calving and short gestation for the benefit of the dairy farmer.

"We will also select genetic traits that will produce a good quality calf with a commercial beef value of at least a four or five star animal that will perform for me. That will be a win-win for all involved."