New kit and initiatives to help producers meet heifer growth targets

Maximise calf potential

With such a glut of products and programmes, all designed to improve the efficiency of calf and heifer rearing, realising a 24-month target calving age should be in reach for all producers. We highlight a few of the latest innovations.

text **Rachael Porter**

Initiative keeps calf growth on track

XLVets has launched an initiative designed to help producers check that calf growth rates, during the first eight weeks of life, are on track to ensure that they calve down, as heifers, at the target age of between 22 and 24 months old.

Called Calf Tracker, it is based on measuring and monitoring five key performance indicators: growth rate to weaning, total mortality, pneumonia rate, scour rate, and total protein level in the blood.

"To maximise lifetime production, the optimum age for first calving is between 22 and 24 months. Calculating back, this means that heifer calves need to average growth rates of between 850g and 1kg per day, so that they can be served at between 13 and 15 months old. At this point they need to have reached 60% of their adult bodyweight," explains Westmorland Veterinary Group's Kirsty Ranson, heads up the XLVets steering group on the initiative.

"So a calf's growth rate in the first eight weeks of life has a massive impact on its future performance."

She adds that the aim of the initiative is to help producers to accelerate growth rates in young calves: "And to enjoy the benefits of getting heifers in-calf sooner. This not only reduces rearing costs, but also means financial returns will be gained sooner."

Producers can access the initiative through their local XLVets' vet practice and they will receive a starter pack to support their monitoring activities. This includes a weigh band for measuring calves and a guidance sheet on how to calculate weights.

"By monitoring growth rates, producers and their vets can see whether calf performance is on track or whether investigations are needed into aspects of health and management to improve it. Poor growth could be the result of underfeed milk powder, disease, or cold weather," says Miss Ranson.

"Another aspect to be assessed is how well antibodies are being transferred from the colostrum and conferring immunity to the calf. Vets will be taking blood samples from calves in their first week of life and measuring the total protein level. They will look at the average as well as the variation, because these figures will flag up whether changes to colostrum management and feeding are needed.

"And with more than 40 XLVets practices offering the scheme, we will be compiling the data so that calf performance can be benchmarked within a practice, and also across our practices nationwide."

Cold-weather pointers to maintain daily live-weight gain

- Make sure every calf receives adequate quality colostrum
- Step up energy intake – by increasing the amount of milk offered per day. Increasing the oil content of the milk replacer from 16% to 20% has a negligible effect on daily energy intake
- Increase the level of milk solids by 100g per day for every 10°C temperature drop below 20°C to maintain growth rates.
- Reduce cold drafts and maintaining adequate ventilation.
- Install a system to drain moisture, where neccessary
- Ensure bedding is kept clean and dry and provide plenty of deep straw bedding – it provides insulation and reduces body heat loss
- Use calf jackets
- Provide an external heat source close to calves

Tool kit to maximise heifer potential

A programme designed to help producers 'grow' more profitable cows has been launched by Volac. Called Feed For Growth, it features a 'road map', accompanying calculator and comprehensive set of technical guides.

Feed For Growth allows producers to really focus on young stock management – from day one – to help ensure that heifer replacements calve between 23 and 25 months of age. This is the optimum age, according to Royal Veterinary College research findings, that concluded that cattle lived longer, had fewer problems in later life and subsequently produced more milk per day throughout their life compared with heifers that calved at a later age.

The programme enables producers to create their own heifer rearing 'road map', which sets individual unit objectives and helps producers to track performance and continually review it. This allows then to check that each animal is on target to reach puberty by nine months old, first service at between 13 and 14 months old and conception by 15 months of age. An on-line calculator sets growth targets and the level of feed required, while back up technical information offers advice on all three external influencing performance factors – environment, health and nutrition.

"Producers spend 20% of their total annual farm investment on rearing replacements. But 22.5% of live-born heifers fail to make their first lactation and for the remainder 'breakeven' is not achieved until at least the middle of their second lactation," says Volac's Jackie Bradley.

"This 'tool kit' will enable producers to better understand, plan, manage and review, and ultimately maximise their herd's untapped potential."

Heatwave is forecast to increase growth rates

Winner of the RABDF Livestock and Machinery Innovation award, at this year's Livestock Event, the Pyon Products' Heatwave Milkwarmer can feed up tot 30 calves and, according to the manufacturer, offers many benefits over cold milk feeding.

Not least are higher daily live weight gains and healthier stock, since warm milk is digested more efficienctly. The company also claims that it's hygienic, because the milk is stored cold – saves time and also reduces waste.

The system allows just one bulk reservoir of cold milk to be prepared each day. The milk is then heated just before being delivered to the teat, allowing the calf to access warm milk on multiple occasions during the day. This unique 'once a day' system makes milk available all day.

Not only will dairy heifers benefit, but bull calves will also develop faster, and can be ready for market a week earlier, according to the manufacturer. The system is available from Wynnstay and costs £385 plus VAT.

Are you ready for winter?

Volac is reminding producers that falling temperatures mean that calves may require more milk in order to maintain growth rates and immune function.

To achieve targeted performance they will require additional feed and management.

Calves can grow at an average 0.8kg per day in their first few weeks under normal conditions if fed sufficient levels of milk – 900g of milk solids, alongside dry feed and water, that's when the environmental temperature ranges between 15°C and 25°C, what's termed the thermoneutral zone.

During the first three weeks of life and when temperatures plummet to less than 15°C, they'll start using energy from feed to keep warm. High risk calves – those that experienced a difficult birth and twins – are more vulnerable and will feel cold at higher temperatures. In fact daily energy requirements increase by up to 30% once the temperature drops below freezing.

By their fourth week, they'll be more robust and won't feel the cold until about 0°C. However, high moisture levels and draughts will dramatically increase their susceptibility to cold stress. Draughts of just 5mph will make calves feel between 8°C and 10°C colder.

Cold stress results in energy being diverted from growth to maintaining body temperature. Consequently growth rates will fall and the calf will become more susceptible to disease, such as respiratory infections and scours, because less energy is also available for immune function.

Milk replacer supports health and performance

A calf milk replacer, which the manufacturer claims will help to ensure that calves get off to the best possible start, is now available from Wynnstay.

Turbo Start has been formulated to comply with the 'life start' concept, which is based on on-going research into how to get calves growing quickly and healthily. Alongside specific management protocols, this milk can help producers to rear profitable animals that are set to calve at between 22 and 24 months old.

The product is a highly digestible whey-based milk powder with added oils to supply energy. This milk powder also has the additional benefits of high levels of vitamin E, to support immune function, along with Greenline, which is a synergetic blend of ingredients designed to support optimum health and animal performance.

The milk can be fed via bucket, teat or computerised machine. Typical recommended intakes would be a minimum of 900g/head/day.

Designed to be fed as part of an accelerated growth feeding programme with a delicately balanced amino acid profile, the company says that this milk allows producers to feed at higher rates without digestive upset. It adds that Jersey calves, in particular, will thrive from higher protein levels, making the milk replacer the perfect choice for anybody looking to unleash the genetic potential of their future herd.