Livestock



LOOK OUT FOR Sheep attacks warning **p14** New entrant opportunities **p22** Keep you tractor road legal **p48**

Attention to flock hygiene helps to fight off orf Livestock p32



WEANING WAYS

Suckler producer lan Willison is hitting weaning weights way above the national average. **Michael Priestley** finds out how

inimising calf stress and optimising the feed conversion ratios (FCRs) are key to achieving average daily liveweight gains of 1.32kg to weaning for Nottinghamshire farmer Ian Willison.

The Simmental cross Blue cows at Williamswood Farm produced progeny this year that averaged 307kg after 200 days – some 48kg above the AHDB Beef and Lamb average of 259kg.

He says limiting stress factors and supplying quality feed are vital for realising the genetic potential of stock and counteracting possible growth checks.

After some experimentation with outdoor calving following scour issues, Mr Willison opted to return to calving inside, although this time he placed greater focus on cleaning sheds and "getting to the cause of the problem".

Problems with scours and navel-ill are now negligible since daily trailer cleaning and weekly calving shed cleaning regimes were brought in to tackle the problem, rather than relying on treatments.

Calves are expected to be standing and suckling within four hours, and then disbudded within 24 hours, although calves slower off the mark are disbudded on day three. Mr Willison finds this is better for the calves and less stressful for him, as he can disbud on his own.

"We are cutting out a growth check and also reducing the risk of pneumonia at that early stage, because they are only very small buds to deal with," explains Mr Willison.

Calves receive 2ml of pain relief – lasting three days – and a pour-on fly treatment before being turned out immediately to grass with cows. Heifers and bulls are segregated at this point to tailor creep feed, which they typically start receiving at six to seven weeks old, removing another stress-point later in life.

CREEPING CALVES

Calves are tempted to switch to creep with an 18% crude protein (CP) calf-rearing pellet before switching to a 17% CP, high-neutral detergent fibre and low-starch (19%) nut to optimise frame development.

"Creep nuts are geared towards growing the frame of the animal, meaning we look to use high protein and lower starch. Too much starch and the animal can quickly become fat," says Mr Willison, who says using a proper calf pellet definitely pays off.

"We have tried several feeds for young calves, including mixing barley and sugar beet, but you soon see the benefits of moving to a proper rearing nut."

To hit the top weaning weights,





producers must capitalise on a calf's phenomenal FCR from birth to weaning (typically ranging from 2.5-4.5:1), according to Harper Adams University beef specialist Simon Marsh.

From studies and observations, he believes many suckler enterprises are restricting the potential of their calves.

He says farmers should target daily liveweight gains of 1.2-1.35kg for heifers and bulls.

He prescribes high ME (more than 12.5 MJ/kg DM) creep feeds to tap into the potential FCR of pre-weaned calves and says Mr Willison is right to target protein at bulls. Ideally, Mr Marsh likes to see creep contain high levels of bypass digest-

MANAGEMENT TIPS

- Focus on cow condition and breeding values for easy calving
 Ensure early colostrum intake
 Join a herd health scheme to help minimise calf mortality
- 4 Do not buy foster calves
 5 Maximise early period when calves have high feed
- conversion ratio
 6 Initially offer high-starch creep, then change to high neutral detergent fibre at three months
 7 Include quality digestible undegraded protein minerals in calf creep

ible undegradable protein, which passes through the rumen, directly supporting growth, which soya bean meal can provide.

Mr Marsh says feeding 100-120kg of creep up to weaning increases weaning weights by at least 30kg a calf, which at £200/t (£24/120kg) and a liveweight gain value of £2.50/ kg gives a return of more than £50 a calf. Last winter, Mr Willison's heifer creep intakes were 49kg and bulls took 289kg up to weaning.

Bulls are fed creep ad-lib, with heifers receiving up to 1kg/day until 100 days of age. Bulls are then introduced to their fat ration (50:50 maize silage and barley blend) two weeks prior to weaning, while heifers are introduced to their 50:50 maize and grass silage ration after 100 days, which they take alongside the cows, usually after Christmas.

Home-grown maize supplies the ration, with grass silage used for bulls only if it hits targets of 65-70 D-values, 10-12% protein and DM in the high 20s.

HEALTH AND HOUSING

Health also plays a big part in calves achieving targets.

For five years Mr Willison's herd has been accredited for Johne's, leptospirosis, bovine viral diarrhoea and infectious bovine rhinotracheitis, which he believes has "massively reduced" mortality rates and illnesses. Another important factor is keeping a closed herd. Mr Willison's view is that foster calves from outside never bring profit and often bring problems. Instead, he believes cows that have lost calves are better off being sold as culls.

November sees cows and calves brought inside, where they access outyards, stemming from Mr Willison's philosophy that "it's wrong if you have to trim their backs".

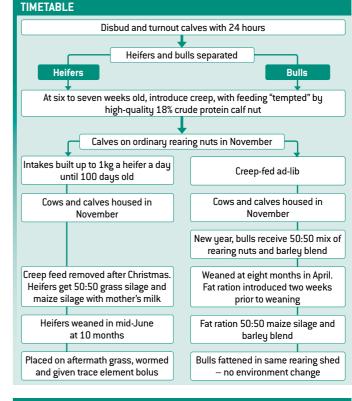
"Sheds are mostly for our benefit. It's important to keep cattle dry, but the cold is not an issue," says Mr Willison. "They are better off outside."

His mantra is "plenty of fresh air, plenty of cattle", putting emphasis on the stack effect caused by large groups of animals creating heat and pulling in fresh air from the outside when wind speeds drop. Straw can be added to keep cattle happy through wintry spells, but he says clipped backs are a sign that ventilation is poor.

He adds: "We have only treated one calf this year for a respiratorytype condition and it is now fine. Using outyards has been a massive help with respiratory concerns."

LOW STRESS SYSTEM

Nutrition, health and management are vital, but to hit high growth levels, Mr Willison says it is paramount to start off with high-EBV bulls to produce calves able to thrive



BEATING THE NATIONAL AVERAGE		
	AHDB	
Autumn-calving herds	Average	
Wean age (days)	278	
Wean weight (kg)	345	
Daily liveweight gain (kg)	1.10	
200-day weight (kg)	259	

Find out how EU drug laws will affect cattle farmers

Livestock p34



lan Willison			
Bulls	Heifers	Average	
229	295	262	
382	366	374	
.49	1.14	1.32	
341	271	307	

FARM FACTS

- 75 Simmental cross Blue suckler cows
- Lowland 80ha farm, including 40ha of reclaimed open-cast coalfield
- Soil type classified as medium loam over limestone
- 36ha permanent pasture rest in leys and 8ha of maize

and grow fast.

The first thing on his mind when analysing EBVs is direct calving ease, with bulls also being required to supply decent growth and muscle characteristics. A close second is gestation length for calving and milk, with a good positive figure for daughter calving ease also a high priority.

But it is his focus across health, breeding and nutrition that allows Mr Willison's bulls to achieve daily liveweight gain of 1.49kg, according to Mr Marsh. And he believes creep feeding over the stress of weaning is a "no-brainer".

"Creep feeding minimises stress and growth check post-weaning. Can anyone justify not feeding creep?" asks Mr Marsh, who recommends feeding 14-17% CP.

Fine-tuning should involve targeting 16-17% CP at continental calves and 14-15% for native breeds or heifers, with Mr Marsh warning against feeding high starch levels.

"High-ME feeds based on digestible fibre with lower starch levels encourage calf frame development, rather than putting on flesh, which is particularly important for heifers" explains Mr Marsh.

WEANING

Mr Willison finds the best approach to weaning is "the quicker the better", with heifers weaned in mid-June and bulls weaned in April.

"Prior to weaning, cow rations are changed from maize and grass silage to hay for three days to help them dry off and encourage creep intake," adds Mr Marsh. "Having the cows at pasture is better for mastitis risk.

⁴Beef cow milk typically has about 3.4% protein as fed, which equates to about 25% on a DM basis.

However, yield peaks in weeks six to eight, so milk forms a smaller proportion of calf nutrient intake. Therefore feeding calf nuts supplies the protein needed for muscle and frame development."