Your NWF Newsletter – Issue 26





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In an industry which continues to be challenged by price pressures and the need to balance profitability with sustainability, quality and innovation from those servicing the farming sector is critical. That's why NWF Agriculture, with over 140 years' experience in meeting farmer needs, is fully committed to a continuous process of growth and investment for the future.

"In the past 12 months, the NWF group has invested £7.5 million. Of this, £6.5m was within agriculture, including the acquisition of SC Feeds and development of a new blends plant in Dumfries," says NWF Group Chief Executive Richard Whiting.

"We now have 52 sales staff nationally, our biggest team ever, and continue to invest in our technical, operations and delivery teams to ensure our customers get the best service possible. That recruitment process is on-going, from graduate trainees to highly experienced people."

NWF Group plc has just delivered its half-year results to the City, with a 15% increase in total volume sales (including SC Feeds acquisition) and a growth in market share (like-for-like results).

"NWF now feeds one-in-six dairy cows in the UK, making us the clear number two in the market. Our expertise extends across the ruminant sector and we believe wholeheartedly in working with our customers to analyse, understand and overcome the challenges their businesses face," says Mr Whiting.

National Sales Director Ian Simpson says working in partnership with farmers to move their businesses forward is central to NWF's ethos.

"With the downward pressure on milk price, we know dairy farmers need more than just a feed company. Gone are the days of the sales team calling in for coffee and a chat before taking the feed order; we know our business will only continue to grow if our customers' businesses do the same.

"From nutrition, to genetics and housing, our team work with customers to make sure they achieve the optimum performance on their farm. Our sustained investment in facilities, people and research means we can offer genuinely tailored solutions for each customer," says Mr Simpson.

From being a regional feed company, NWF Agriculture has grown to a national business with a product range which encompasses not only compound feeds, blends and straights, but also forage additives, grass and forage seeds, calf milk replacers, minerals and a range of speciality feeds. Feed output has increased from 50,000 to 580,000 tonnes per annum in the past 20 years.

"We are focussed on maintaining that sustained growth and our latest results, with £2.5m in profit and the lowest level of debt ever, mean we are ideally placed to keep challenging for number one in the marketplace. Strong growth in Scotland and the north of England sparked a significant investment program at Dumfries last year, and we continue to grow our business in the central and southern regions following the acquisition of JGW Thomas in Devon, and SC Feeds in Staffordshire," says Richard Whiting.

"At the heart of this success is our relationship with our customers. We remain committed to delivering our customers the best possible product range, competitively priced and backed up by expertise and service of the highest quality."

Taking technical expertise into the heart of your farm

In a world heavily reliant on technology to keep moving forward, there remains a critical factor in delivering that technical expertise: people. NWF Agriculture has invested in a team that combines experience, practical knowledge and the latest thinking to give exceptional support and advice to its customers.

"Agriculture is a fast-moving industry and keeping pace with that means continuous staff training. For example, we now have 24 certified Cow Signals master trainers," says NWF National Business Development Director Richard Hughes.

"It has never been more important to get the most from your cows; by learning to read cow behaviour via Cow Signals, it is possible to identify areas for improvement in their surroundings or routine. This holistic approach means cattle are better able to make the most of their genetic potential and of the ration fed to them.

"Correct ration formulation is very important in a successful dairy operation, but just putting the right feed out isn't enough. Central to Cow Signals is assessing cow rumen health using feeding signals; visual assessment of rumen fill gives a good indication of cow health," says Mr Hughes.

It's not just farmer customers who benefit from NWF's trainers; the company has delivered a series of Cow Signals training workshops to Young Farmers' Clubs around the country, says Mr Hughes.

"The next generation of entrants into farming will play a critical role in meeting the growing global demand for food. NWF, as an NFYFC sponsor, believes in supporting young people via training and knowledge transfer. It is reassuring to work for a company which is committed to ensuring that it's personnel stays at the forefront of developments within agriculture and be of benefit to our customers"

In an industry as diverse as the UK dairy sector, having a full 'toolbox' of technical services is key to helping customers

plan and build sustainable, efficient businesses whatever their circumstances. NWF technical solution services are designed to keep herd performance moving in the right direction. In addition to online support through Technical Solutions, farmers and the sales team benefit from the support of the head office technical team providing latest advice.

"The NWF feed efficiency calculator, BCS, dry cow and fertility audits and RPM ration system are just some of the unique services that have been developed to ensure customers' herds are on track. We also offer dairy costings, ration planning, forage analysis and soil analysis; we're definitely not 'just a feed company'," says Mr Hughes.

Working with industry partners such as Barenbrug, ED&F Man, Trouw Nutrition and Cargill on product development means NWF is also at the forefront of bringing cutting-edge R&D to the farmyard.

"Last year we launched DryFix, an innovative new product designed to pro-actively target the cause of production diseases in fresh-calved cows. Fed as either a compound or blend during the crucial 21-day close up period immediately prior to calving, DryFix contains CalFix, a new and patented feed technology from Trouw Nutrition which is manufactured in a partnership agreement between Trouw Nutrition and NWF Agriculture.

"DryFix is part of the new NWF Transition Cow Programme, designed to give farmers technical advice and supporting products to set cows up to succeed once they calve. It's a perfect example of how we see our role in helping livestock farmers achieve the very best they can," says Mr Hughes.

Preparing for Spring

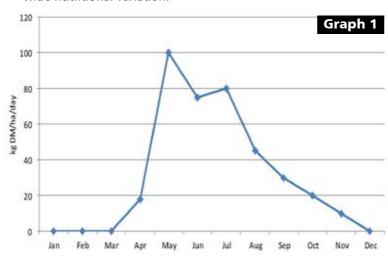


Spring turnout is one of the critical points in the dairy management calendar. Getting it right in terms of dairy cow nutrition means careful planning, says George Franks, NWF Central Sales Director.

As the weather improves, and grass begins to grow, the challenge of turnout and all that it means for cattle management comes to the forefront. Maintaining milk yield, butterfat levels and cow fertility, along with being vigilant for staggers, are the key issues

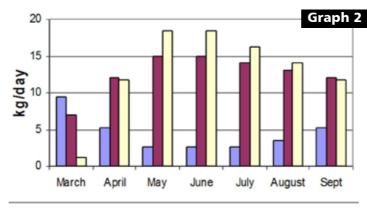
Maintaining milk yield

Depending on the quality of grass silage and other forages being fed as part of the ration at the end of winter, the switch over to grazed grass represents a significant change in nutrients. The abundance of grass in the spring (see graph 1), and its attraction as the lowest cost feed in the ration, is counterbalanced by its wide nutritional variation.



Weather conditions, stocking density, grass cover and variety all combine to make grass a moving target as a component of the ration. Add this to the ever-widening gap between the energy and protein needs of the cow for lactation, health and fertility – particularly in spring-calving herds – and it's easy to see why buffer feeding is recommended at this time.

Drops in cow body condition score (BCS) or milk yield at this time of year, are difficult to recoup over the summer period, when grass quality and availability gradually tails off. Graph 2 shows the target intake values during the turnout period, indicating a continuing requirement for supplementing nutrition.



- Kg's of cake
- Dry Matter Intake (kg/d)
- □ Potential Milk Yield (kg/d)

Buffer feeding 3kg of forage DM as a buffer appears to be optimum, as grazed grass utilization begins to be substituted above this figure (this will equate to around 10kg of fresh weight silage fed per head per day).

Not only does supplementary forage provide nutrients, it helps to ensure rumen fibre structures are maintained particularly when grass is lush. This leads on to the increasing requirement from dairy companies to maintain consistent, and higher milk solids; something that is very dependent on fibre rumination.

Maintaining butterfat percentages

Boosting digestible fibre intake is key to improving rumen function, protecting yields, and maintaining butterfat percentages when cows are grazing lush spring grass. Research shows that milk fat percentage improves as the proportion of digestible fibre in the diet is increased.

- Maintain fibre intakes buffer feed forages such as wholecrop cereals or a mixture of high dry matter grass silage with a good structural fibre level and maize silage. Ensure a good proportion of 1.5-2 inch long fibre in the diet.
- Feed lower protein concentrates with a high inclusion of digestible fibre sources to balance high rumen degradable protein and low levels of digestible fibre in grazed grass.
 Products in the NWF range particularly suitable for this are:
 - Gold Star 15 or Superyield 16 HDF both rations promote energy and structural fibre delivery to enhance the use of protein from grazing, and maintain butterfat levels.
 - Bespoke blends, formulated by your NWF feed specialist to take into consideration the nutrients driving from your buffer forages, and the grazing nutrition at the time. Both forage samples and fresh grass samples can be analysed by our laboratory on site, and bespoke blends formulated directly from these results (speedy turnaround of samples and formulations is achieved on a daily basis).
- Avoid high levels of oil in the diet diets with 4% free oil or more will depress butterfat percentages. If oil is required in the diet, consider protected fats such Evolution or Butterfat Extra.

Maintaining fertility

While grazed spring grass often has high levels of protein, 'capturing' this protein during digestion can be a problem. This causes an increase in levels of rumen ammonia being absorbed directly across the rumen wall which, in turn, results in high blood urea levels and may cause fertility problems, classically cows 'bulling but not holding'.

Tips for minimising the risk of increasing levels of urea are:

- Feed lower levels of crude protein in concentrates, 16% dairy cakes are readily available in our cake range.
- Feed high digestible fibre to supply fermentable organic matter
- Improve protein utilisation and actively decrease urea levels through the inclusion of digestible energy sources through bespoke blend inclusions.

Need answers, but short on time?

- Website features the latest feeding and farm management information for dairy, beef and sheep farmers
- Source of information covering seasonal topics, research and solutions
- Option to submit questions via smart phone, tablet or laptop

"NWF Technical Solutions is an excellent website that provides information and answers to subjects that I face on farm such as fertility, building design, heifer rearing and calf rearing. The website is easy to navigate and if I can't find an answer I simply submit a question and receive a response from NWF within 24hours"

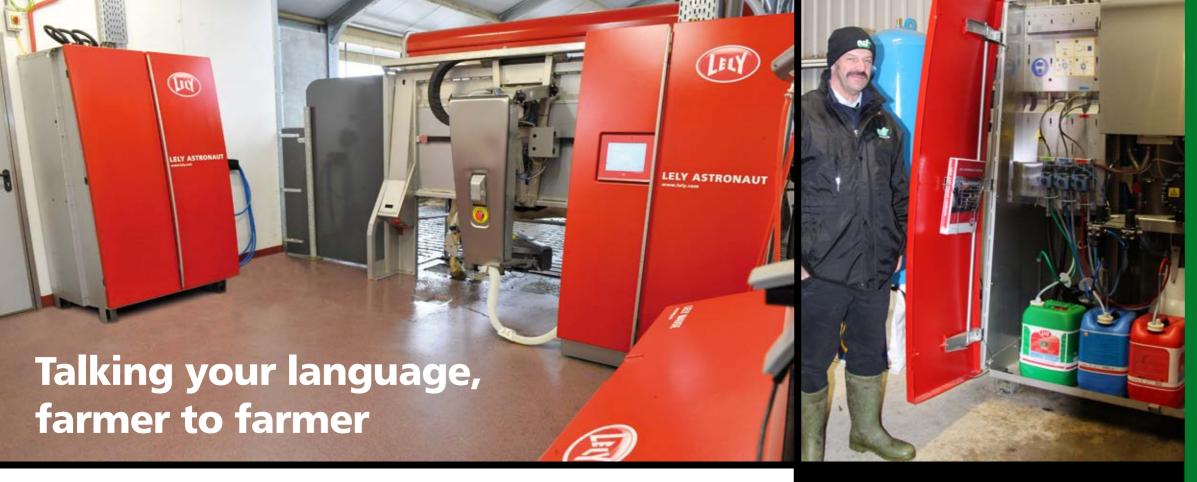
Mr Edwards, Staffordshire Dairy Farmer





Visit our FREE website for answers and solutions

http://technicalsolutions.nwfagriculture.co.uk



South West sales specialist John Cann knows only too well the challenges facing the UK dairy sector, as he combines his role at NWF with running his own 60-cow herd in Devon.

WHEN 60 German Holstein heifers stepped off the transporter off some heifers which are giving 30 litres a day. It might be at Devon farmer John Cann's Pulworthy Farm, at Haverleigh, Devon, in November 2013, it was the start of a new chapter in his dairying life. Not only was he starting afresh with a young herd; John also went for a robotic milking system.

"The heifers came off the transporter at 7am on November 5 2013 and began their training on the Lely A4 robot parlour by 9am. It took four days of 24/7 training to get the heifers using it right, but by three weeks in they were all using it by themselves," says John, who had been forced to sell his previous herd after losing a farm tenancy.

The system is a simple one; cows in milk are housed year round and fed top quality big bale haylage plus an NWF 17% protein, maize-based compound in the robot. It allows John to work for NWF as a cattle product manager alongside having the herd, which his children, Sarah and Michael, manage while he is away.

"The system is designed to allow me to combine farming with my job at NWF, and nothing gives you a better insight into the challenges facing dairying than being at the coalface yourself. When I go up the farm drive to see a customer, I know I'm speaking the same language, farmer to farmer," says John, whose wife, Tracey, and other daughter, Emma, help with the farm paperwork.

It wasn't all plain sailing with the new system; John discovered that the sand used to bed the cows was highly abrasive to the automatic cluster removal ropes. These have since been replaced by stainless steel chains.

"I've also found, on a calving index of 370 days, that I'm drying

heresy to some, but I'm looking at letting the calving index drift to 390 days or so.

"That milk is the most profitable I produce, coming from cows getting very little cake, and yet I'm drying them off and tipping it down the drain. There's also the huge metabolic stress involved in doing so, and then expecting the cow to come back into milk six weeks later and get back in calf.

"The genetics in these modern Holsteins mean they just want to milk and milk, particularly on a robot system, so I'd rather take advantage of that. A calving index of 365 is a man-made figure convenient to us instead of the cow, especially when we're no longer doing 5,500 litres but are closer to 10,000 litres."

In the first 12 months of production, the heifers averaged 9,100 litres, 600 litres ahead of budget. This puts them well on schedule for the two-year target of 10,000 litres.

"We now have 72 animals; the aim is to get to 60 in milk and 12 dry at any one time, with six calving a month. Everything goes to a beef bull as we prefer to use the land and buildings we have for the herd, rather than rearing our own," says John, who has brought in English-bred heifers to increase herd size.

As anticipated, having the robot has freed up management time for cow observation – which in turn has paid dividends in heat detection and subsequent pregnancy rates.

The cows wear electronic ID rumination collars which collect data on cudding as well as flagging cows coming into heat, or showing altered behaviour because they are lame or sick.

The robot in numbers

In its first 12 months, the Lely A4 did 64,000 milkings and used:

- 10 sets of liners
- 10 sets of brushes
- 109,000 litres of water (300 litres/day)

John (above) also calculated it cost the equivalent of 1ppl in electricity



Northern Team New Sales Specialist



The Northern sales team has been further strengthened following the appointment of Isaac Nutter who joins as NWF Sales Specialist covering Lancashire and Cumbria.

A graduate from Aberystwyth University with a BSc Agriculture, Isaac has extensive experience of dairy, beef and sheep farming gained from working on various farms including the family farm

Isaac has recently been lecturing Agriculture at Mysercough College covering both practical and theory based modules.

Isaac can be contacted on 07595 566252 or by email isaac.nutter@nwfagriculture.co.uk



NEW NWF Summer Grazing Mineral

Launched for spring 2015 is NWF's summer grazing mineral specially formulated to balance feeding at grass, support dietary needs, promote health and build immunity.

- Organic selenium Sel-Pex™
- Vitamin F
- Cell Shield™ a unique antioxidant

The new NWF summer grazing mineral is available nationally either supplied in feed or as free access. For information, prices and to order call Adam Chalklin on 01829 262382 or email adam.chalklin@nwfagriculture.co.uk



For most dairy farmers, silage is a year-round part of the ration. Clamp capacity and management is an essential part of making the most of your forage and subsequent cow performance.

"It's good practice to keep a check on forage stocks, particularly with the variable spring weather we often encounter in the UK. A sudden wet spell can mean cows staying in longer and more pressure on silage stocks," says Rob Fuller, NWF technical sales specialist.

"Having had a reasonable year for silage making, most farms have a good amount of silage, albeit of variable analysis. Whether you are on a semi or full TMR, it is vital to make every mouthful count; this means clamp management is key to providing a healthy, balanced diet."

It is important to analyse your forages as you progress through the clamp to enable your nutritionist to formulate a wellbalanced diet. NWF provides a forage analysis service for fresh grass, grass silage, maize, whole-crop, hay and haylage, and aims to have fully comprehensive results back to farmers within 24 hours of the sample being taken.

"Check your stocks regularly and spread them out in use to balance fibre intake and avoid acidosis. Where forage analysis shows high acid loading, consider a forage replacement approach with a compound or blend designed to balance the nutrient requirements of the cows.

"Knowing how much forage is left in the clamp is essential to allow ration optimum formulation. As part of the NWF Toolkit, we offer customers access to our Clamp Capacities Calculator; speak to your local NWF Sales Specialist for more information," advises Rob.

Proper silage feed-out management is essential to maintain consistent and high quality ensiled forages and high moisture grains.





- Significant dry matter (DM) losses can occur during feedout
 poor face management can double DM losses
- Losses tend to be digestible sugars, rather than fibre
- This can have a major impact on palatability, consumption and animal performance
- Feed-out management is more critical during warm periods, when the risk of aerobic spoilage is greater

"Shear grabs and block cutters are a must for grass silage, cutting a clean, smooth block from the face. Silage defacers 'shave' silage off the clamp face and also reduce oxygen penetration; they are increasingly popular for maize silage."

Good face management

Aim to:

- 1. Feed off a minimum of 4-6 inches across the entire clamp face daily during winter months
- 2. Feed off a minimum of 10-12 inches during summer months
- 3. Keep the face clean, and floor free of loose material
- 4. Remove and dispose of visibly damaged (mouldy) silage from the clamp

Avoid:

- 1. Removing excess silage cover, as this increases oxygen exposure to the feed
- 2. Loose silage lying in front of the clamp for extended periods, as this increases aerobic microbial activity
- 3. Dragging silage out of the clamp, which creates fracture lines in the silage mass and allows oxygen penetration to promote aerobic activity

"As silaging season approaches, it's also worth a reminder to make sure clamps are clean and prepared for the forage coming in. When ensiling the crop, aim to achieve good compaction and coverage to reduce air in the clamp, which in turn helps reduce yeasts.

"Use of a good additive can be very beneficial; NWF's new Sila-Guard 40 Quattro contains Lactoccus lactis which has the

unique ability to produce nisin, a bacteriocin known to inhibit clostridia and consequently reduce dry matter losses in the silage. It also has the ability to combine with other components in NWF Sila-Guard 40 Quattro to knock out many of the yeasts and moulds which lead to aerobic spoilage and health problems in dairy cattle," says Mr Fuller.

"A question I commonly get asked is how long should you leave the silage in the clamp before feeding it to ruminants. The textbook answer is six weeks for complete fermentation to take place; however, you can feed from three weeks (not before) BUT make sure where the silage has been cut away that the seal is tight with a few tyres to prevent the polythene from flapping about and to stop air/water getting in.

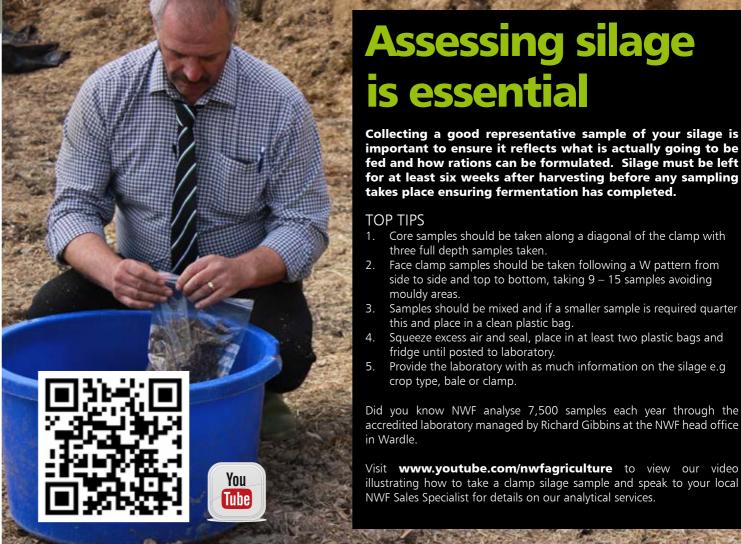
"The average ambient temperature of silage is between 18 and 21degC, but this can vary from 11degC at the bottom of the clamp to 35-39degC at the top and in the corners, due to incomplete compaction.

"For every 1degC increase in temperature, 0.25% DM is lost. If you think you may have a problem, check using a thermometer."

Once silage is cut from the clamp, it is immediately exposed to air and this increases once in the TMR. The feed is then colonised by microbes and yeasts (moulds), which can grow in number very quickly; their activity generates heat, odour and tastes in the TMR, all of which reduce intake and performance.

"This causes a double impact - the overall feed value per kg is reduced as the most valuable feed ingredients ferment, plus stock eat less. Adding Fresh-Guard to your NWF Molasses ration prevents TMR diets from heating up and causing waste and spoilage.

"Results have shown that Fresh Guard improves stability and DM feed intake, combating issues which arise during May to September when temperatures rise. Where mycotoxins may be an issue, try an effective binder such as mycosorbA+," concludes Mr Fuller.



Have you visited the NWF YouTube channel recently?



The channel features videos from recent farm and college workshops including manure sieving, body condition scoring and rumen fill



Visit www.youtube.co.uk/nwfagriculture



New for 2015 from NWF is a silage additive featuring one of the biggest breakthroughs in microbial features a patented strain of the Lactococcus lactis which brings new and innovative thinking to improving silage and feed value from grass, maize, Sila-Guard 40 Quattro also features: or wholecrop silage.

Lactoccus lactis has the unique ability to produce nisin, a bacteriocin known to inhibit clostridia and consequently reduce dry matter losses in the silage. It also has the ability to combine with other components in NWF Sila-Guard 40 Quattro to knock out many of the yeasts and moulds which lead to aerobic spoilage and health problems in dairy cattle.

"The updated and improved formula of NWF Sila-Guard 40 Quattro delivers the potential to produce high quality silage with a balanced acid profile for livestock. The majority of UK silage is produced within a dry matter range of 20% to 27%, which can make it very susceptible to extremes of lactic acid production," says Leigh Berrisford, NWF Sales Specialist.

"Highly lactic silage can be more susceptible to heating and spoilage. Sila-Guard 40 Quattro is designed to avoid these

"A balanced acid profile in silage is also rumen-friendly, helping avoid issues such as SARA (sub-acute rumen acidosis), responsible for productivity, health, and fertility problems in dairy cattle.

Sila-Guard 40 Quattro includes an acetic acid producing microorganism, which preserves more effectively and with a muchsilage technology in decades. Sila-Guard 40 Quattro reduced acid load – this benefits silage in the pit through yeast inhibition and reduces pH depression in the rumen."

- Sugar-enhancing xylanase enzyme
- · Lactobacillus buchneri to increase acetic acid content, for more stable silage.
- Fast growing dominating Enterococcus faecium bacteria

"The production of lactic acid is essential for control of the initial fermentation, but it is vital that the activity of lactic acid producers is in a controlled range. The unique combination of E. faecium and L. lactis in NWF Sila-Guard 40 Quattro works in harmony with L. buchneri to produce the ideal relationship of silage acids," savs Leigh.

"Making top quality, rumen-friendly silage is always a challenge, with the need to avoid acidity, reduced fibre content, mineral imbalance and spoilage. NWF Sila-Guard 40 Quattro uses the latest technology to give producers the very best chance of putting the very best silage in the clamp."





The new range of NWF Grass Seed Mixtures has been launched by NWF Agriculture. The eight-strong range features forage grass seed mixtures designed to deliver yield and digestible grass for livestock, using high rated varieties featured on the NIAB 2015 and SRUC recommended list.

The NWF grass seed mixtures are grown, blended and packaged by Barenbrug UK, one of the largest grass seed breeders and producers in the UK and Europe. Barenbrug UK are internationally respected grass breeders dedicated to ensuring farmers achieve the maximum return from grass growth.

Champion™

The number one selling mixture, Champion is a long-term ley (5yrs plus) for both silage and grazing. It delivers top quality forage production whether cut or grazed, and is available with clover (Ensign White or Ensign Duet) and without clover.

Champion offers a long growing season and a dense leafy sward, with varieties which offer a good level of disease resistance. Seagoe is the highest yielding intermediate tetraploid available; Drumbo (late perennial ryegrass) provides the best quality forage available in this category and Tyrella (LPR) has excellent spring growth.

Adding white clover boosts the protein and mineral content of the grass, improves grazing intakes and fixes over 100kg N/ ha/annum of atmospheric nitrogen. In trials, cattle grazed on a clover/grass sward had an intake of 9.2kg of DM per day and a live-weight gain of 1.1kg per day, compared with those grazed only on grass of 6.7kg intake and 0.8kg/day live-weight gain.

SHORT TERM LEYS (2-3 YEARS)

Ultra Early Abundance™

Designed for intensive production over an 18 to 36-month period, Ultra Early Abundance delivers up to four silage cuts with over-winter grazing. Ideal as a catch crop, it gives excellent production from early spring or late summer sowing.

Ultra Hi-Pro Red™

This high protein forage production mixture is the most profitable legume/grass mix for silage production. Ultra Hi-Pro Red is excellent for early season growth, and provides a long production season into late autumn.

Ensign Red is a new, unique mixture of red clovers which, when included in a clover/grass silage, are highly palatable, giving increased intakes. Red clover yields up to 16t DM/ha over three or four cuts of silage at 16 - 19% CP, with the option to graze. It should be noted that caution is required with breeding sheep, and the soil must contain good pH, P and K levels.

Ultra Turbo Mix™

A good value 100% Italian ryegrass blend, Ultra Turbo Mix has very high yields within a 1-2 year lifespan. It has a rapid establishment and guaranteed early and late growth, with a good response to high nitrogen inputs.

MEDIUM TERM LEYS (4-5 YEARS)

Ultra Cut n Graze™

With excellent early season growth, Ultra Cut n Graze is ideal for early lambing or extended grazing of dairy cows. It offers up to three cuts per year, plus high quality grazing from varieties selected for digestibility and palatability.

LONG TERM LEYS (5 YEARS PLUS)

Ultra Intensive Dairy™

A versatile mixture for cutting and permanent pasture, Ultra Intensive Dairy includes white clovers for vitamins and minerals. It provides grazing from early spring to late autumn.

Ultra Longlife™

Suited to intensive production over many years, Ultra Longlife creates a tight, persistent sward resistant to poaching. This is a highly digestible and palatable ley which provides grazing from early spring to late autumn.

Five of the grass seed mixtures (Ultra Early Abundance, Ultra Intensive Dairy, Ultra Longlife and Champion (with and without clover) are available in Scotland and are all SAC listed varieties for 2015.

Call: 0800 756 2787 for NWF Grass Seed Leaflet and **FREE NWF Sward Stick.**



My weaned calves are scouring. They are being fed starter pellets (18% protein), and hay; the vet says there are no bugs around that can be causing it. What could it be?

My first impression is that your post-weaning scours are caused by a cycle of events:

For some reason, at post weaning the calves' rumen isn't as well developed as it would ideally be.

By weaning from milk, we remove a source of nutrition - the calf is hungry and, therefore, looks for alternative feed sources (starter pellets, straw, etc). They eat large quantities of these alternative feed sources because they're hungry, and their rumen fills up.

If there is a) insufficient rumen population to break down this increase in solid feed intake or b) insufficient rumen lining development to absorb what is being broken down, then a mass of undigested feed passes into the small intestine.

Once in the small intestine, this undigested feed experiences secondary fermentation (similar to that in a silage clamp where air has got in), and bacteria breed on this mess, which in turn is expelled as 'scour'.

Don't be fooled by the fact the calves are eating lots of starter pellets; it's easy to think they are doing well because of their appetite and intake. In reality, if the calves are not thriving and are scouring, this intake is driven by hunger and the food is then largely wasted.

In order to avoid this, there are a number of calf management 'essentials' which should be part of your system:

Feed excellent quality colostrum within six hours of birth to allow the calf the advantage of passive immunity. This helps prevent disease from challenging growth rate early in life, and causing long term damage to lifetime performance

Make sure your calves receive sufficient, balanced calorie intake through milk replacer to take advantage of their genetic potential pre-weaning (this can be up to 900g milk replacer per day) Ideally, calves should receive at least two milk feeds a day (and more if practical to mimic the 'little and often' feeding they would do from their dam).

Only wean calves when they are consuming 1.5kg of starter pellet (admittedly this can be difficult to judge when calves are grouped) Only use the calendar (age in weeks) as a guide, and if a calf looks smaller and/or weaker, allow it that bit longer on

milk – scrimping on milk powder is a false economy; these calves are the future of your herd!

Wean calves gradually; research has shown this presents the best results with uptake and digestion of solid feed.

Once weaned and introduced to hay or silage, try feeding concentrate as a mix with forage. This reduces the gorging/ selection process of concentrate first, then picking at forage, and allows an even intake of nutrients, leading to a more uniform fermentation/digestion process, particularly in an immature ruminant.

Finally, an early attack of crypto or rotavirus could have caused intestinal tract damage. This can be avoided in the future by ensuring good calving pen and calf shed hygiene (pressure-wash and disinfect housing between batches) and by the provision of adequate clean, dry straw bedding.

Nutrition is also key when fighting off disease challenges such as rotavirus; calves need an input of sufficient calories through milk powder to develop a good immune system. Support the calf by feeding a milk replacer that includes a health pack, such as Protimax in Ultra Milk Blue, which provides antibodies for antibodies for salmonella, e-coli, coronavirus and rotavirus, to help fight health challenges.

All the best things start from the inside...

...NWF Ultra Milk Powder

NWF Ultra Milk Blue Calf Milk Powder is an excellent product that enables fast cost-effective growth and development with enhanced concentrate feed intake at the critical stage in life.

A high-fat calf milk replacer that mixes well and is easily digested.

Formulation specially developed using:

- Carefully selected milk solids with maximum nutritional value
- Balanced blends of vegetable fats and oils, homogenised and emulsified for maximum digestibility
- Full supplement of vitamins, minerals and trace elements.

FEATURES

GreenlineTN Calf Milk

A synergistic blend of nutritional ingredients designed to help support optimum health and animal performance.

Protimax®

Egg powder, rich in specific proteins which help calves meet the challenges of early life, included at the correct levels to achieve proven results.

Nuklospray

A special co-spray dried complex of pre-digested (hydrolysed) proteins which are more readily digested and absorbed

Natural Digestibility

Enhancers improve fat utilisation and absorption.

To order NWF Milk Powder call 0800 756 2787



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Take a positive **NEW direction**

A complete nutritional programme developed to manage your dairy cow successfully as she moves from pregnancy to lactation, for a faster return to a positive energy balance.

- Increase dry matter intake
- Minimize negative energy
- **Reduce clinical and** sub-clinical milk fever

NWF Transition Cow Programme





Transition cow management was one of the topics covered at a recent dairy seminar held in Barcelona, Spain. NWF Scotland Technical Manager Patricia Goldie, one of four staff who attended the seminar, reports

One of the presentations at the Barcelona Conference looked at dry cow management in a case study herd. All dry cows received the same dry cow ration, which was slightly elevated in required nutrients (they were being slightly overfed).

There was no transition ration fed to any cow pre-calving, and a high calcium level was detected in the multipurpose dry cow ration. No anionic salt, such as magnesium chloride, and no DCAB balancing was being catered for - so the calcium loading of the ration was a big risk factor.

This type of scenario puts the calving cow in danger of subclinical milk fever and its associated problems, including metritis, displaced abomasum and poor fertility. At an estimated cost of £200 per cow, it's clear that getting transition cow management right is critical.

Calcium background

On the day of calving, a dairy cow will produce 10 litres or more of colostrum containing at least 23g of calcium. This challenges the ability of the cow to maintain adequate blood calcium levels at the onset of lactation.

If inadequate blood calcium concentrations occur at the onset of lactation, cows will experience milk fever – different symptoms occur for differing blood calcium concentrations. The risk of milk fever occurring increases by 9% per lactation (Lean et al, 2006) and subclinical milk fever affects 25% of heifers and 50% of multiparous cows (Goff, 2008).

Symptoms are difficult to detect and often remain unnoticed; however smooth muscle function such as rumen and uterus contractions require calcium. If calcium supply at this point is not adequate, this will trigger subclinical milk fever symptoms.

Feeding for the next lactation

It's easy to see from the above why getting the transition program right on any farm is critical. It is the absolute foundation of lactation yield, health, fertility and longevity.

There are several factors to address in the management of a successful dry cow program:

- Minimise stress through correct management and feeding, taking into consideration the social status of introducing heifers, trough space, cow comfort and feed availability
- Achieve a correct (BCS 3) body condition score, which is stable – fat cows eat less
- Maintain rumen fill to limit the risk of displaced abomasum and drive early lactation feed intake
- Establish early lactation dry matter intake to minimise negative energy balance, and maximise fertility.
- Deliver the correct mineral and vitamin balance to fight milk fever through hormone control. This is achieved by:
 - Starving calcium supply during the dry period
 - Maximising the efficiency of calcium absorption and
 - Ensuring these processes are "primed" and ready for the huge demand for calcium at the start of lactation.

NWF can help you to address transition cow management in a variety of ways. Our knowledgeable ruminant sales specialists can help you gauge the condition score of your later lactation cows, to ensure they receive the correct nutrients during their lactation so they can be dried off at a body condition of 3; they can also design rations, using forage material you have on farm,

to drive early lactation dry matter intakes.

We now have 24 Cow Signals Master Trainers to help you evaluate dry cow and transition cow housing to maximise cow comfort, and feed intakes, and minimise cow stress. The longer a cow lies down during her dry period, the more productive her next lactation will be.

Finally, last autumn NWF launched DryFix, a unique calcium binding product suitable for feeding during the dry/transition

While we know cows need be fed diets low in calcium during the close-up period three weeks prior to calving, to stimulate calcium mobilisation from the liver, gut and bones, however in practice it is difficult to formulate diets supplying less than 60g calcium per cow per day, particularly on traditional UK dry cows which feature grass silage and straw.

Rather than trying to substantially alter the ration ingredients, DryFix works by locking up dietary calcium during the close-up

NWF DryFix is fed at the rate of 3.5kg/day in the 21 days before calving. Trials have shown an extra 1.64kg DMI in the first 10 days of lactation, worth 38 litres of milk. The cost per cow is around £20 above that of a standard dry cow ration, but this is equivalent to the value of a reduction in production disease by a mere 10%, or the cost of an extra 65 litres per lactation – Dryfix will achieve significantly more than this in reduction of subclinical milk fever costs alone.

Dryfix is available in nut or blend form. More information on its use and feed rates is available from your NWF Ruminant Sales Specialist or alternatively call 0800 756 2787.

Shows 2015

Meet the NWF Team at this seasons shows, find out information on our products and services and enjoy refreshments.

Borderway UK Dairy Expo Sat 7th March

Staffordshire County ShowWed 27th and Thurs
28th May

Royal Cornwall Show Thurs 4th, Fri 5th and Sat 6th June

Livestock Wed 8th & Thurs 9th July

Nantwich Show Wed 29th July

Dumfries & Lockerbie Agricultural Show Sat 1st August

North Devon Wed 5th August

Honiton Show Thurs 6th August Okehampton Show Thurs 13th August

Westmorland Show Thurs 10th Sept

UK Dairy Day Wed 16th Sept

Cheshire Ploughing Match Wed 23rd Sept

Dairy ShowWed 7th Oct

Brailsford Ploughing Match Wed 7th Oct

Borderway Agri Expo Fri 30th Oct

Agri ScotWed 18th Nov

We look forward to meeting you at the 2015 shows.

NWF Agriculture Senior Executive Appointments

Two new senior executive appointments have been made by NWF Agriculture. Andrew Downie has joined the company as Managing Director; and Mark Evington is the new Finance Director, following the retirement of Ian Kenmuir after 34 years.

Andrew joins NWF from the ABF Plc, where he held the position of Head of Operations, overseeing multisite facilities across the UK and responsible for circa 600 employees. Prior to this Andrew has held senior positions at AB World Foods and Patak's Food Ltd; leading capital investment projects and successfully integrating business acquisitions into the mainstream business.

Degree educated in Business Management and CIMA qualified, Andrew has 20 years' experience of working in the food sector.

Mark joins the company after 14 years at Cogent Breeding Ltd (part of Grosvenor Estate). He was Finance Director for the agriculture division of Grosvenor Farm Holdings from 2001 before being promoted to the role of Managing Director of Cogent in 2005.

Holding a BA honours in Accounting and Finance along with Chartered Accountant status, Mark has over 20 years' experience in finance.

Useful Contacts

General Enquiries 0800 756 2787 **Customer Services** 0800 262397 Feed Orders 0800 262397 01829 262251 **Blends Straights & Liquids** 01829 262394 **Minerals** 01829 262382 **Milk Powders** 01829 262346 **Seed & Fertiliser** 01829 262294 Technical Team 01829 797147 01829 262338 **Transport Mill Production** 01829 262254 **Customer Accounts** 01829 262284 Seed, Fertiliser & Additives 01829 262294 Trading Desk Sales Support 01829 262342

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FACEBOOK: Like 'NWF Cow Signals'