



360°

news from  
**advanced nutrition**  
Summer 2017

## Election Results, Hard Brexit / Soft Brexit, Exchange Rates and Michael Gove.

**At the time of writing we are still reeling from the shock election results and all that means for the country.**

What a week! Currency fluctuations, a cabinet re-shuffle, doubts over our negotiating stance at the Brexit talks.

Let's start with currency. Why does it matter? Two years ago the pound was trading at \$1.587 today it's \$1.277. As we import a fair proportion of our animal feed and generally these are traded in dollars, the exchange rate plays a major part in the cost of these feeds. Take soya for example; if soya was trading at £320/t (\$508) 2 years ago, and we bought the same soya today it would cost £398/t (still \$508).

Unfortunately for us, it's not just soya, most other commodities have increased in exactly the same way. It's not all doom and gloom though. The products we sell and possibly export, beef, lamb, milk etc. benefit from the weak pound. There is one thing for sure, the markets are getting increasingly hard to predict. It's no longer just about supply and demand, as currency and Hedge Funds can have a far greater effect our goods.

Brexit negotiations start this week, David Davis and his team are over in Brussels more or less fighting for our commercial lives. Trade agreements will form a huge part of the negotiations with the pressure from the EU to link these to the freedom of movement of people across our borders. These trade agreements are vital to protect the future livelihood of UK farmers. A bad deal will hit us where it hurts!

Throw in the CAP for good measure and this makes for a nerve-racking time for all of us. The previous administration at DEFRA indicated that the basic payment scheme revenue to UK farmers would remain broadly unchanged until 2020, but will it? Enter stage left Michael Gove; no experience of agriculture whatsoever. Ah they say, but he has experience. If you ask anyone on the receiving end of his stewardship at the Justice Department or indeed the Department for Education they will testify that their "experience" of Michael Gove was not an entirely happy one. He has a reputation for ripping up the blueprint and starting again.

At DEFRA that may be a good thing rather than bad; who knows. I do take solace in the fact that George Eustice survived the re-shuffle, he is from farming stock and does know a bit about agriculture.

Back to normality. This issue of 360 is packed with features and articles that I hope you find of interest and that may help you with some ideas on how you can improve your business; or at least the parts that the politicians can't interfere with! I hope you enjoy the read.

**Rumen Health talk with Anna Mette Ugelvig**  
Green Valley Golf Academy, Castle Kennedy,  
DG9 8SH, Thursday 13th July starting at 7:30.

**Ian Brown, Managing Director**

### Also in this issue...



**Major cost savings**



**Re-seeding benefits**



**Calf Perfection**



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# Major Cost Savings

*Rob Watkins explains how farmers can make considerable cost savings by moving from a three cut to five cut silage strategy.*



For years, more frequent cutting has been perceived as expensive in terms of contracting and harvesting costs, as well as lower yield per cut.

What I am suggesting is, cutting at approximately monthly intervals and introducing better forage management in order to achieve higher quality silage and produce more milk from forage.

***Kingshay costings show the average 8,000 litre herd is achieving just 18% from forage when in fact 30% to 35% is an appropriate and achievable target.***

Taking five cuts will result in less kg DM/acre harvested per cut. This will increase the cost of slurry and fertiliser application and foraging but, can significantly increase forage yield and deliver potential concentrate savings.

***For example, a 0.8 MJ/Kg DM increase in energy over five cuts on 100 acres versus three cuts over the same area is obtainable, resulting in a financial benefit of £17,348, even when taking the additional costs into consideration, (see Table 1).***

<b>Table 1: Three cut verses five cut silage systems</b>	<b>Three cut system</b>	<b>Five cut system</b>
Acres to harvest	100	100
Total yield (t DM/acre)	4.5	5.6
Total DM tonnage	450	562.5
ME/kg DM	11.0	11.8
MJ harvested/1t DM	11,000	11,800
MJ harvested/acre	49,500	66,375
Potential litres milk harvested/acre	9,519	12,764
Concentrate equivalent/acre (kg)	842	1,130
Total MJ harvested	4,950,000	6,637,500
Concentrate equivalent harvested (t)	430.4	577.2
Potential reduction in concentrate fed (t)		146.8
Total cost of silage making inc slurry, fertiliser and foraging (£)	18,000	30,000
Total cost t/DM (£)	40	53.33
Cost/unit ME (p)	0.364	0.452
Extra cost (£)		12,000
Potential concentrate* savings (£)		29,348
Financial benefits (£)		17,348

\*Concentrate at £200/tonne

We often allocate the area to cut without calculating how much we will require for the winter in terms of stock numbers, quantity per head and quality. It's important to establish those parameters and then set targets for cutting dates, tonnage and quality to be harvested. If you're aiming for 35% of yield from forage, then you can calculate the required quality and amount of dry matter per head.

**Carefully look at factors that will affect those targets, such as percentage lameness incidences and fertility. Don't be tempted to get more milk from forage the easy way by cutting the amount of concentrate fed; this decision more often than not runs in conjunction with high lameness and fertility issues, resulting in falling yields, declining fertility and higher vet costs.**



## When to Cut

The plant will tell us! Each ryegrass plant is able to support just three emerged leaves. As soon as number four emerges then one will die thereby lowering the plant's energy levels. Cutting is really no different to setting grazing covers, which are farm dependent to a point of between 2,700kg and 2,900kg DM/ha and residuals to 1,650kg DM/ha.

If we cut too late or in fact too short, the sward will take longer to recover. If, however we leave a couple of growing points on modern cultivars, we can be back in with the mower in 28 to 30 days.

Getting contractors on board can, at times, be challenging. However, agreeing a plan and making sure they understand early in the season is key. Confirm target chop length, how you want the cut ensiled, which additive, and both your quality and DM targets.

Remember your business depends on MJ per hectare harvested while theirs is focused on ha/hour harvested, consequently they'll benefit from the extra cuts. Remind them and share the results with them when you reach your targets. If they work with you, then stick to that contractor, otherwise consider a change.



**Rob has extensive experience of growing & feeding forage. For more information please get in touch:  
m: 07867 384382 / e: [rob@arn-ltd.com](mailto:rob@arn-ltd.com)**

# Rising to the Challenge

**Richard Bainbridge explains how he gives his clients the head start to stay one step ahead of the game.**

Continuing to be involved in his family's pedigree dairy business on the Cumbrian-Lancashire border, Richard joined the Advanced Nutrition team in 2013 having decided to pursue a career in dairy nutrition. With a background in farming, Richard is able to relate to the everyday challenges that farmers face and takes a practical approach to animal health and nutrition.

As a Ruminant Nutritionist I am always happy for my client's successes. What is more crucial in my role is helping nurture both their stock and farm businesses, optimising health and production, while responding to the many challenges they face. The following articles demonstrate how I continue to meet the needs of my clients.



**Steven Holden**

## Responding to challenges

**Brothers Wayne and Gavin Inman farm together with their father David at Strickland Hill, near Witherslack in Cumbria. Until 2015, their 140 cow herd, averaging 11,500 litres milk sold per cow per year, generally calved in and freshened well but, the cows were suddenly developing milk fever post calving.**

***“We lost a few cows, we were giving bottles of calcium left right and centre with no effect, and obviously these were only the visible signs”. Wayne explains.***

Analysis of third cut silage from 2015 showed that calcium levels were very high.

Their farm vet, Jen Hutchinson of Farm Gate Vets had suggested X-Zelit but Wayne felt the product was cost prohibitive. With little success in finding a solution, I began working alongside the Inman family involving Jen at every step. X-Zelit was then introduced in April.

Fourteen days pre-calving, cows were fed X-Zelit at the rate of 500gms/cow per day. Since then there has only been one case of milk fever, a cow that calved fourteen days early! So I could say the X-Zelit has a 100% success rate.

Wayne says the annual cost of X-Zelit is easily compensated for by not losing any cows as well as other benefits such as fewer retained cleansings, improved fertility, higher peak yield achieved earlier in lactation and, time saved not having to bottle or bolus cows so often.



## Optimising Health & Production

**Steven Holden of Milbrow Farm, Preston has 95 milkers averaging 9,000 litres milk sold per cow per year.**

**Steven explained, “We had previously seen issues with acidosis in the herd and have tried feeding yeasts in the past with variable results. Around three years ago we started working with Richard and he suggested we feed Rumisaf as part of a wider review of our nutrition.”**

Steven’s herd is housed at night all through the year and has access to grazing by day in the spring and summer months. “Richard suggested we follow a very simple nutritional approach that is all about keeping cows healthy so that they perform,” Steven explained. “We take three cuts of high quality grass silage each year and buffer feed throughout the grazing period to maintain performance. Cows are housed in cubicles in the winter, fed TMR and then fed to yield in the parlour.”

And the results speak for themselves. “Since we started working with Richard and included Rumisaf in our rations, milk yield has increased by around 1,000 litres per cow. In the last year our calving index has fallen from 413 days to 387 days and our calving to conception has fallen from 122 days to 98. We average 1.7 serves/cow and submission rate at 100 days stands at 78%.”

“Ultimately, I feed Rumisaf to ensure that the rumen bugs are working properly in my cows,” Steven concluded. “Rumisaf definitely works and delivers consistency in terms of performance. Since I’ve been feeding it our fertility has been good and yield has improved. What’s more, whereas in the past butterfat always dropped when we turned cows out to grass, it now remains steady, which is great for us as we are paid on milk composition.”

**David Booth of Old Hall Farm, introduced X-Zelit to his dry cow regime.**

Minimising problems around the transition period, clients can see significant financial gains in terms of fertility, milk production and general cow health. The benefits of X-Zelit are greater than just a milk fever preventative. For example, David Booth of Old Hall Farm, Feizor had no clinical milk fever problems but introduced X-Zelit to his dry-cow regime. He has a milking herd of 120, averaging 12,000 litres milk sold per cow per year.

**David says, “I am really pleased with the results. I wouldn’t be without it now. I don’t have to get up and calve cows in the night, they do it themselves. Cows calve on their own as well as the heifers. We’ve just had two sets of twins calve and cleanse without any intervention. There have been less metabolic issues and intakes are better after calving resulting in cows hitting peak yields with ease”.**



**David Booth**

## Nurturing

AHDB reported that every day over an age at first calving of 24 months costs £2.87 a head. With this in mind it is imperative to give the heifers the best start.

This was important to Derbyshire dairy farmer, Michael Broadley. Advanced NuStart a calf creep designed for high genetic merit heifers, was introduced to stimulate appetite and kill the non-desirable gut bacteria.

The prebiotic ingredients included in NuStart act as a source of nutrients for healthy bacteria which then aids efficient digestion. Later the calves move on to our Progressive Heifer range.

*“The calves have a more consistent growth rate. They are not just putting frame on but gaining condition too. This has allowed us to serve heifers sooner and now calving at just under two-years old”*  
**says Michael.**



**Michael Broadley**



## Moving forward

What I hope this article shows is that we stand by our clients and our focus is on moving farms forward. We work as an integral part of their team in order to achieve this. Our farm management approach, Advanced 360, plays an important part in our work on farm. It helps to identify any bottlenecks, allows solutions to be found and provide the basis for continual monitoring. I try to provide my clients with practical solutions and when required, source high quality animal feeds, minerals and supplements to complement their system.



**For more information on how Richard can keep your herd one step ahead, you can contact him on:  
m: 07585 320 400 / e: [richard@arn-ltd.com](mailto:richard@arn-ltd.com)**

# What is the true cost benefit of re-seeding?



Re-seeding may appear to be yet another extra cost at around £200 per acre, but with five-year payback at 3.75:1, it can more than pay for itself. Rejuvenating long-established ley by re-seeding can increase the quantity and quality of home-grown forage thereby reducing the reliance on bought-in feed.

In conjunction with DLF, a three year field study has been completed on a Lancashire dairy unit. The unit has a mixed soil type profile dominated by loam, an average 1,400mm rainfall and it targets first cut within the first ten days of May.

Each year, approximately 15 acres were re-seeded. The same specialist DLF forage mixture comprising festuoliums and hybrid ryegrasses were chosen to provide high quality leafy grass with persistence, stress tolerance and disease resistance. 30% of the perennial mixture was made up of varieties providing improved cell wall digestibility. The mix had a three to five year life-span. The fields were each sampled the following year five days prior to first cut. **See Table 1.**

**Table 1**

Year sown	2016	2015	2014
DM%	16.8	17.5	16.9
ME MJ/kg	12.1	12.3	12
Protein %	22.7	19.4	19
Freshweight t/acre	11.33	10.112	9.71
DM t/acre	1.90	1.77	1.64
Total MJ/acre	23,029	21,773	19,693
MJ difference		1,257	3,336
% difference in yield		94.54	85.51

**Table 2:**

## Seedbed preparation and sowing costs

	£/acre
Ploughing	24
Power harrowing	21
Rolling (pre and post sowing)	14
Cross drilling	32
Sub total	91

The above table shows the high DM and ME values that can be achieved from re-seeding when compared with an older ley. The new ley sown in 2016 is producing 14% more MJ of energy per acre of fresh grass cut than the three year old ley sown in 2014.

We can look at milk yield value to establish the cost benefit of re-seeding. The 3,336MJ per acre difference in ME yield between 2016 and 2014 equates to 600 litres; at 25p per litre the milk value from forage is increased by £150. Remember this figure represents the deterioration in grass quality over three years. If your leys are older, this will increase substantially.

Considering the investment, reseeding costs around £200 per acre including preparation of the field and sowing at approximately £90 per acre, (NAAC Charges 2017) (**Table 2**). Spraying, seedbed fertiliser and seed may total a further £110 per acre. Over a five year ley this spend work outs at approximately £40 a year offering a conservative 3.75:1 return on additional milk from forage.



**If you'd like to see if Mark could help maximise your home-grown forage, you can contact him:**  
**m: 07880 794 004 / e: [mark@arn-ltd.com](mailto:mark@arn-ltd.com)**

# Calf Perfection... Move your farm forward!

Rearing heifer calves is the second largest annual expense of a dairy businesses' production costs after feed. With no income until the first lactation and no profit until the second lactation.

Heifers are the future of the dairy herd and deserve to have the best management that incorporates all the latest research and management advice. In return, they will repay the investment through higher milk production and a longer productive life.

## Where can it all go wrong?

### Age of heifer entering dairy herd

The average age of heifers entering the UK dairy herd is 28-29 months. Calving heifers over 24 months increases rearing costs by £2.87 per day. That's an additional £344 per heifer calving at 28 months (AHDB), which is £20,000/year on a 200 cow herd.

### Culling rate in main herd

Keeping cows in the milking herd healthy and productive lowers the number of replacement heifers required. Surplus heifers can be sold to provide an additional income.

### Calf mortality

Approximately 7% of heifers don't make it into the milking herd. If a heifer was valued at £1500, that is a financial loss of up to £10,500 per 100 cows. (AHDB)

### New calved heifer mortality

It is estimated that up to 15% heifers leave the herd before 100 days in milk. These animals will have all the costs attached to them without any returns.



**Dr Sandra Godden**

## FREE EVENT INVITATION

Advanced Nutrition would like to extend an invitation for you to join us on-farm this August to discuss tackling inefficiencies in heifer rearing.

We are delighted to welcome Dr Sandra Godden, a world-renowned US based professor in Dairy Population Medicine. Dr Godden will discuss all aspects of heifer rearing including calf nutrition during the farm walk.

Advanced Nutrition's, Bryn Davies, will look at the role dry cows play in maximising the potential of the unborn calf and discuss ways in which we can improve dry cow management.

The UK dairy industry is facing increased scrutiny on antibiotic usage. To address this issue, reduce rearing costs, and increase heifer survival, Advanced Nutrition will be launching our new milk powder especially formulated with calf health in mind.

The day will be highly valuable with practical solutions and plenty of opportunities to have your questions answered by some of our trading partners from the dairy industry.

**The event is free to attend and lunch will be provided.**  
Please confirm your attendance by calling us on 015242 63139.

**Monday 7th August 11am - 2pm**

Ingleston Farm, Irongray, Dumfries,  
Dumfries & Galloway, DG2 9TR

By kind permission of **John Rome**

**Tuesday 8th August 11am - 2pm**

North Farm, Heaton with Oxcliffe,  
Morecambe, Lancashire, LA3 3ES

By kind permission of **Alan Bargh**