The Packer
1st January 2018
John Giles

Brexit's effect on the UK & U.S.

The general industry wisdom in the United Kingdom is that post Brexit, farmers will need to up their game, almost regardless of what sort of deal we end up with the rest of Europe. There will also be some potential effects on the U.S. sector too, with opportunities for more trade to the UK and maybe inward investment from the UK to the U.S.

Our insight into the horticultural sector suggests that under some possible Brexit scenarios, domestic prices might well rise, and UK producers should take the opportunity to increase production.

The UK market is dominated, in most cases, by sales to the leading supermarkets. It will be those growers who are in groups and organisations closely linked to these supply chains who will be in the best position to prosper.

As such, there will be a further polarisation of the producer base between small, part-time farms and then larger, more commercially driven units of production who are focused on supplying a relatively small number of key supermarket customers.

UK supermarkets are keen to promote the “Britishness” of the produce they sell, and will continue to provide this support to UK growers, although growers will still need to adhere to well established production and accreditation standards.

Labour is a key issue for the horticultural sector and will continue to be a major focus.

Post Brexit there are likely to be more controls on the movement of labour in to the UK in some way or another. This could be to the detriment of the horticultural sector.

For some of the growing organisations who have developed joint ventures or operations outside of the UK, the solution would be to increase production in these overseas operations.

This might be especially relevant for commodity varieties and concentrated UK-based production of more niche and higher value varieties.

The U.S. might become one of the places where UK businesses look to extent their growing operations in an effort to secure new international markets away from the EU. The UK is already a net importer of fresh produce, and Brexit would only intensify the overall market environment.

However, it might offer more opportunities for international growers and exporters of products such as apples, grapes, pears and berries depending on new trade agreements with the U.S. and other so-called third countries of supply.

The U.S. export sector over the past 10 years has been much more focused on markets in Southeast Asia, China, India and Latin America. So, while the UK market post-Brexit might be of more interest, it is difficult to see that the UK will become a major target for them in the very short term.

The real outcome of Brexit might be to see an acceleration of trends we have seen over the past 10 years or so. It promises to be a period of further change for the UK horticulture sector, but for the forward-looking and well-prepared, it will also be a time of opportunity.

John Giles is a divisional director with Promar, and is the current chairman of the Food, Drink & Agriculture Group of the Chartered Institute of Marketing. E-mail him at john.giles@genusplc.com

The Farmer (Shropshire) & Shropshire Star
1st January 2018
Nigel Davies

Dairy margin increase reported

Farming | Published: 1 hour ago

> Data from the latest Milkminder costed herds report illustrates that the average Milkminder herd achieved a significant increase of 47 per cent in its monthly Margin Over Purchased Feed (MOPF) for the month of September this year compared to September 2016.

Nigel Davies, Promar's National Consultancy Manager, explained that this illustrates how positive the swing in milk price volatility has been over the last 12 months, ahead of the current threat of weakening commodity prices.

"This notable impact has been driven by increasing yield and cow numbers, but particularly milk price," he says. "This resulted in the average Milkminder herd achieving a significant increase of 47 per cent or £9,428 in its monthly MOPF for September alone compared to September last year.

"This is a marked premium compared to the previous year, which should benefit reported accounts and the reported bottom line for this financial year," he added.

Darlington & Stockton Times
6th January 2018
Nigel Davies

Milk increase

THE latest figures from Promar's Milkminder costed herds show a 5.2 per cent increase in production.

The report, for October 2017, showed an average of 1.670m litres per herd per year compared to 1.587m litres in October 2016.

Nigel Davies, Promar's national consultancy manager, said the data mirrored the increases seen elsewhere globally over the past 12 months.

If the annual rate of increase was sustained, then by 2021, the average Milkminder herd would produce well over two million litres.

He said: "While added margin does not by itself lead to greater profit or a better cash position, then aided by the increase in milk prices during the 12-month period prior to October 2017, the average producer in the sample reported an additional herd margin over purchased feed (MOPF) of £86,803."

The Grocer
6th January 2018
Tim Harper

A return to stability? What 2018 has in store for prices

Supply outlook is good, but Brexit negotiations cast a shadow

Britain's era of cheap food came to an inglorious end last year as food prices surged in the wake of the drop in sterling and high raw material prices for some key commodities. Chocolate, olive oil, bread, salmon, biscuits, crisps and sweets were among the foods affected, with grocery inflation peaking at 2.9% in October. Since then things have started to slow down, so what's the outlook this year?

Despite the hike in UK shoppers' bills, global food prices were actually "pretty low" last year, says Kona Haque, head of research at global agricultural commodities merchant ED&F Man. "We've seen food prices trending down for the last five years and that didn't change in 2017," she says, with abundant stocks of grains and oilseeds set to keep prices down in 2018.

What's more, some of the raw materials hit by adverse weather and supply challenges in recent years have a better production outlook for 2018. Palm oil production is set to rise 10% year on year, says Stefan Vogel, head of agri commodity markets research at Rabobank, while sugar prices are set to keep falling thanks to increases in production in India, Thailand and the EU following the end of quotas, says Haque.

At the same time, the dairy supply crisis that pushed butter prices to record levels last year has begun to ease thanks to a bounce back in EU and UK milk production, while supplies of domestic pork and Norwegian salmon are also set to recover from last year's squeeze.

The return of La Niña conditions could disrupt crops, but modelling by meteorologists suggests the effects of the phenomenon will be relatively mild. If the world experiences a "catastrophic" year in terms of weather we might see an uplift in food prices, says Haque, but large carry-over stocks and the spread of production should limit price increases.

The sterling has also begun to level off. "The pound/euro exchange rate has been relatively stable during the last three months at around 1.125 euros/pound," says Tim Harper, senior consultant and head of data at Promar.

While the direction of travel of the ongoing Brexit negotiations could see sterling strengthen or weaken further as the year progresses, there is unlikely to be the same dramatic drop in value as there was immediately after the EU referendum, insists Haque. "I think we can safely assume that most of the foreign exchange impact on the cost of importing food was felt in 2017," she adds.

Which doesn't mean shoppers will be safe from price rises in 2018. So far, retailers have been very reluctant to pass on the existing extra cost of some foods, but they might not be able to keep a lid on prices indefinitely. Allied Bakeries told investors in November it was holding negotiations with retailers around price recovery because of surging wheat costs.

Some commodities are also facing price rises in 2018 – including cocoa, maize and orange juice And Brexit has wider implications for the food industry than higher raw material costs – with uncertainties around labour and future trade agreements already affecting the cost of growing food in Britain. "Ongoing uncertainty about volumes and sources of labour will start to impact on growers' plans to expand or continue at current levels of production," says British Growers Association CEO Jack Ward.

If the government doesn't negotiate the free trade agreement with the EU the industry is urging, a new era of expensive food could be on the cards.

The Farmer
January 2018
John Giles & Lizzie Bonsall

Panel helps students

Turn technology to your advantage, study the market and do what you do really well. This was the key advice given to Reaseheath College agriculture students at a 'question time' discussion on careers in farming and food production.

The event, sponsored by the Food, Drink & Agricultural Group of the Chartered Institute of Marketing (CIM) and organised by the Nantwich college's Agricultural Development Academy and agricultural department, offered valuable advice on the opportunities available in the industry, how to build a career and the attributes employers look for when recruiting.

Undergraduates and final year Level 3 Extended Diploma in Agriculture students took the opportunity to quiz a panel of experienced advisors from across the supply chain.

John Giles (chair of CIM's Food, Drink and Agricultural Group and Divisional Director at Promar International), Lizzie Bonsall (Consultant, Promar International), Sally Scott (Barclays Bank Agricultural Manager) and Dan Lovatt (dairy farmer and Reaseheath alumnus), offered advice on how to make the best of opportunities post Brexit. All agreed that there would be a wide range of careers available for talented people with a combination of academic, practical and commercial skills and the determination to succeed. Business and people management skills would be critical as the market would become more volatile, and there was a shortage of people with these skills in the industry.

Advised John Giles: "A degree will always give you the edge because it demonstrates you have a trained mind and can apply yourself. But interpersonal and life skills are very important because in the end it will come down to how well you manage your business, whatever that might be, and how you interact with your teams and with the people you employ.

"Good graduates will get jobs. There are great opportunities out there provided you study hard and embrace what Reaseheath has to offer. But be proactive, take advantage of every opportunity, join discussion groups, network and never stop learning."

Lizzie Bonsall agreed that business and people management skills would be key to success post-Brexit. She said: "It's about understanding the market and doing the best to your ability. Relatively small farms can be profitable without the need for large investment provided you manage them well."

Sally Scott suggested defining what the market needed and considering specialist enterprises such as hydroponics or vineyards. She said: "It's not necessarily about being bigger, but being cleverer. Keep your business to a size where you can control what you put into it."

She also reminded the students that apprenticeships, such as those offered through Barclays, remained an excellent way to gain a sponsored degree while continuing in paid work at the same time.

For more about our degrees and diplomas in agriculture see www.reaseheath.ac.uk/agriculture

Panel members Sally Scott, Lizzie Bonsall, Dan Lovatt and John Giles with undergraduates Holly McCall, Larry Anscombe, Rachel Armour and Matt Scott

Farmers Guardian
12th January 2018
Nigel Davies

Average Milkminder herd output increases

A 5.2 PER cent year-on-year increase in average milk production to 1.67 million litres per herd per year has been seen in Promar's Milkminder costed herds report from October 2017.

When compared to the 12 months prior to October 2016, when average output for same herds stood at 1.587 million litres, Nigel Davies, Promar's national consultancy manager, says this is a very significant increase.

He says: "This data mirrors the increases seen elsewhere globally over the past 12 months."

Mr Davies adds if this annual rate of increase was to be sustained, then in just four years' time the average Milkminder herd would be producing well over two million litres.

He adds: "While added margin does not by itself lead to greater profit or a better cash position, when aided by the increase in milk prices during the 12-month period prior to October 2017, the average producer in the sample reported an additional herd margin over purchased feed of £86,803.

"Analysis of the data shows although £78,902 of this figure was milk price dependant, £7,901 resulted directly from added output and greater efficiency."

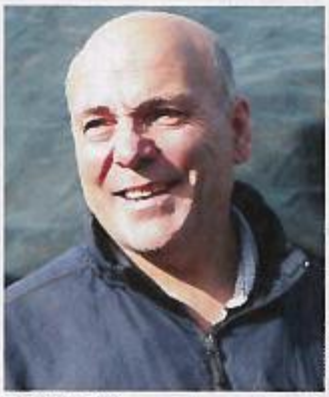
Farmers Guardian
12th January 2018
Tom Gill

Carbon footprint project delivers big savings on-farm

North Widcombe Farm, West Harptree, Avon has been home to the Gay family since 1525. However, when Colston Gay and his wife Celia returned home in 1981 to farm, they decided to expand and diversify the business in order to build an enterprise which could support the family for years to come.

This drive and determination has seen the business thrive, with the farm extending from 202 hectares (500 acres) to 607ha (1,500 acres). However, the biggest challenge to date has been growing the business sustainably.

Mr Gay says: "My focus has always been to build for the future, to ensure that my children have the same opportunities I was given. Both of our sons, Thomas and Henry-James, are heavily involved in the day-to-day running of the business, so investment and business development is important in order to support them both.



Colston Gay

"In 2014 we were approached by the Duchy of Cornwall about building an anaerobic digestion [AD] plant on the farm. The Duchy was keen to realise a sustainable AD plant on the estate, and this presented us with a great opportunity to remove reliance on fossil fuels, and improve the sustainability of our business."

Environmental impact

It was while conducting the feasibility study for the AD plant that the family began to further explore and understand the environmental impact of the farm enterprise.

"We faced a number of hurdles relating to the potential risks AD can pose to the environment if not managed properly. We live in an Area of Outstanding Natural Beauty and with the Chew Valley reservoir only a few miles away, there were understandably questions raised over the location of the plant."

"This made us think more carefully about the impact our farming practices have on the environment and we began to monitor our carbon footprint, with the help of our environmental consultant Tom Gill," says Mr Gay.

The pre-AD assessment found the farm had a slightly higher than average carbon footprint, explains Mr Gill, head of environment at Promar.

"Our initial calculations found the dairy enterprise had a footprint of 1.4 CO_2e per litre of milk. This figure is slightly higher than average, but a breakdown of the data showed after methane emissions from cattle and purchased feed, there was potential to initially reduce the footprint by focusing on fuel and power inputs, and manure management.

"The industry standard carbon footprint for fuel and power is 0.4 CO_2e/litre, however we calculated a figure of 0.12 CO_2e/litre for the farm. Interestingly, this was found to be primarily due to discrepancies in energy levels due to the substantial level of diversification across the farm. Despite this, there was still a lot to gain," says Mr Gill.

"The installation of the AD plant has seen the dairy carbon footprint reduce to 1.25 CO_2e/litre, which is an impressive 11 per cent reduction in carbon emissions.

Using grass and maize silage for AD has had a big impact on the efficiency of the cows as they are only fed quality silage.

Tom Gill

"The footprint for fuel and power has reduced by 33 per cent, with the potential to decrease further if the heat generated can be utilised on-site.

"Manure management emissions have also seen a significant reduction of 40 per cent. The plant is run on a feedstock predominantly consisting of slurry, manure and straw bedding. The slurry is fed continuously from the shed to the plant, meaning cattle slurry is no longer stored in an open lagoon – a component of many farms, which is renowned for releasing high levels of methane and ammonia into the atmosphere," adds Mr Gill.

Mr Gay explains further efficiencies have been seen on-farm as a result of the AD installation, which have an impact on the carbon footprint.

Supplement

"There are times of the year, during summer for example, when we have to supplement the AD feedstock to ensure optimum production is reached," he says.

"We made the decision to use grass and maize silage which we felt was of reduced quality to make this up. This has had two main benefits, firstly we do not need to buy-in any additional feedstock for the digester, minimising input costs. And secondly, we are also not feeding any reduced-quality silage to the cows.

"This has a big impact on the efficiency of our cows, helping to improve yield from forage as they are only fed quality silage. It also carries a much smaller environmental impact than growing maize specifically for AD."

Carbon footprint has a direct link to cost of production, therefore any on-farm efficiencies will play a part in reducing a farm's footprint, explains Mr Gill.

"The bottom line is that carbon footprint relates to how efficiently you can produce your product. So, the more efficient your milk production is, the lower the carbon footprint and the greater the opportunity for financial gains.

"Contrary to popular belief, herd size also bears no impact on carbon footprint. We often hear the misconception that the bigger the farm, the bigger the environmental impact. But a large herd can be more efficient than a small herd, depending on the production system and direct inputs," adds Mr Gill.

Mr Gay says he has always considered future impact when making big business decisions.

"The one question I regularly ask myself is whether the business will still be here in 20 years. And, through using data to drive efficiencies, I truly believe it will be.

"Our next step will be to ensure that we are pushing for efficiency rather than outright expansion. My mantra has always been to make the most of what we are producing, often by removing the middleman, and I believe we still have room to improve.

"The carbon footprint analysis has identified areas where we can achieve real gains, and one of those areas is through utilising the heat we produce.

"We are currently spending about £3,000 a month on bedding when the cows are housed, and I would like to explore the possibility of drying maize and using that as bedding, which would not only save money but would provide added feed value for the digester.

"Utilising what would otherwise be left in the field could give us a significant saving to the cost of production," adds Mr Gay.

"We hope to have paid off the AD plant within six years, which will enable us to create a steady income to secure the future of the farm for many more generations to come."

Expansion timeline

- **1981** Colston Gay and wife Celia returned to the farm
- **1997** Converted to organic dairy production
- **2000** Purchased Manor Farm and converted buildings into a farm shop and tea room
- **2010** Installed solar panels
- **2013** Purchased dairy processing unit
- **2016** Built anaerobic digestion plant

North Widcombe Farm

- 607ha (1,500 acres) across three units – part rented from the Duchy of Cornwall
- 450-cow organic milking herd supplying OMSCo
- 162ha (400 acres) arable ground
- Beef unit finishing 350 cattle a year
- 300 breeding ewes
- Milk processing unit
- Farm shop and tea room
- 30kVA solar panel installation
- 250kWh anaerobic digester

"The one question I regularly ask myself is whether the business will still be here in 20 years. And, through using data to drive efficiencies, I truly believe it will be

COLSTON GAY

British Dairying
January 2018
Nigel Davies

Striking difference in financial performance of top 25% of dairy herds

Using the latest Farm Business Accounts (FBA) data, for the financial year-ending March 2017, Promar International has reported a staggering £90,000 difference in profit between the top 25% of the sample compared to the average performing dairy farm business.

Nigel Davies, Promar's national consultancy manager, says 19% of the difference in profit can be attributed to milk price but the remaining superiority comes from technical competencies.

"With improved on-farm efficiencies, detailed management of margins and an eye on variable and overhead cost efficiency, the top 25% are achieving a £448 operating profit per cow advantage over the average business," says Nigel.

He adds that not only are their yields greater, at 223 litres per cow, but they are also driving feed efficiencies of 0.33ppl better than the average, and their herd health is improved with more calvings, less culls, lower replacement rates and less deaths.

"And, it's not just the management of cows where efficiency gains are being made," says Nigel. "Typically, the top 25% have an £18 cow advantage when it comes to forage costs and a £28 cow advantage in youngstock rearing costs, equating to 0.22ppl and 0.33ppl respectively."

He also notes there was a £216 operating profit per cow difference advantage on overheads, achieved largely through machinery and labour efficiencies, equating to a striking 2.53ppl.

However, Nigel comments that while the average farm sample increased their herd by four cows during the period, taking the average herd size to 203 cows, the top 25% of financially performing herds had eight fewer cows.

"This highlights that while scale is important, a continual need to improve efficiencies, not just economies of scale, across the

Promar Milkminder latest figures

Rolling figures	2016	2017
Cows in herd	198	204
Yield per cow (litres)	7986	8067
Butterfat	4.05%	4.04%
Protein	3.26%	3.27%
Yield from forage (l/cow)	2,619	2,477
Concentrate use per litre (kg/l)	0.32	0.32
Concentrate use per cow (t/cow)	2.517	2.604
Concentrate cost (£/tonne)	199	211
Margin over purchased feed cow/l	16.94	20.36
Milk price (ppl)	22.916	27.427

Nigel Davies presenting the latest Milkminder updates.

business is crucial to maximising profitability."

The FBA bottom line

Nigel states that the variability in business performance highlights the opportunity for producers to benchmark against both their own historical performance and that of others, to begin to recognise where efficiencies can be made to improve their bottom line.

"All dairy businesses benefit from a good milk price to improve their profitability, yet, as witnessed for the top 25% of dairy farm businesses, compared to their peers, well over two thirds of their financial superiority comes from improvements in technical competencies.

He highlights the importance of focussing on the economics of all on-farm activities wherever possible.

"For the average farm sample, profits after depreciation for the year-ending March 2017 fell by 20%, to £43,404 compared to £54,441 in the previous year."

He issues further caution by adding that profit after depreciation without grants and subsidies was only £13,169. "What's more, support payments for the 2016-17 financial year benefitted from favourable exchange rates which will have bolstered support payments compared to the previous year."

Good decisions should be made

Showcasing the true volatility of milk prices, Niel explains how in just four years the average GB milk price has fluctuated from a fall of 14ppl to a rise of 12ppl. "Milk prices reached their lowest point in nine years in July 2016, with the milk price falling by 14ppl between late 2013 and July 2016. However, in just over 12 months UK prices recovered by 12ppl as of October 2017, highlighting the unpredictable nature, and speed, at which milk prices can change.

"That's an incredibly difficult backcloth against which to make long-term decisions. There's a lot of uncertainty out there, yet one thing for certain is that milk prices will continue to be volatile.

Take the longer-term view

"But businesses need to evolve and decisions must be made," says Nigel. However, he encourages producers to consider their decision-making horizon.

"All businesses should consider what drives their current decision making. Some will take a shorter-term view based on the size of their current milk cheque or current bank balance, while other businesses will make longer term assessments based on real information like FBA and long-term trends of profitability.

"Those businesses taking a longer-term view are far more likely to be making sounder decisions and investments and it's an approach that'll be required more and more, as volatility becomes the norm."

Positive March 2018 year end

Looking more immediately ahead in accounting terms to the March 2018 year-end, Nigel is optimistic about the outlook, which should report improved profitability for most.

"The milk price received by farmers in the year to date from April 2017, will feed through to notable improvements in gross profits and exceed any increased costs and inflationary pressures," says Nigel.

Although he stresses that increased profit does not necessarily mean an improved cash position, so every farm business should be carefully considering the dynamics of its own financial performance.

"Using data such as Promar's Farm Business Accounts or MilkMinder, will help dairy farmers identify key areas for investment and build a clear sense of direction and focus for the future."

Yellow News
January 2018
John Giles

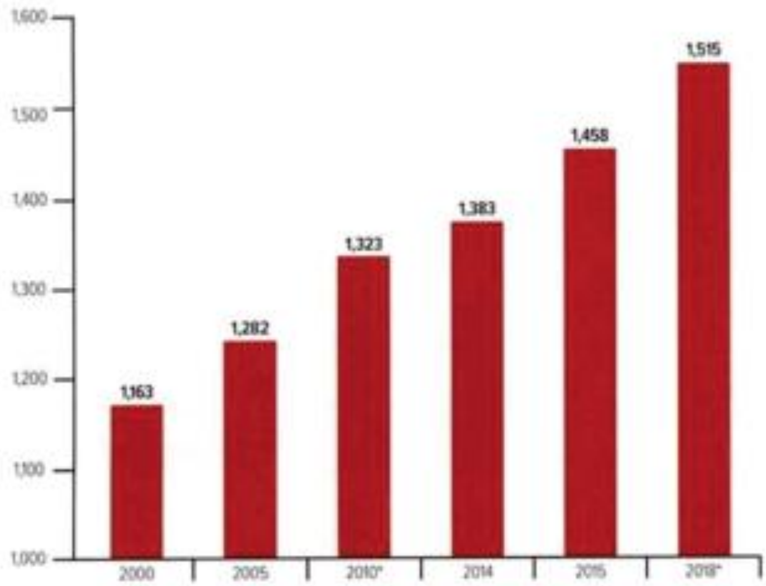
John Giles
is divisional director at agri consultancy Promar International

WHY POULTRY IS PRIME FOR INVESTMENT

With food inflation recently reaching a five-year high of 3%, the UK poultry industry could be set to prosper.

This increased inflation means UK consumers are likely to continue to look to the poultry sector for a value for money source of protein. And this could drive up demand, providing the perfect opportunity to attract investment and build further on the growth seen over the last 10 years in UK production.

UK broiler meat production
'000 tonnes



*53-week statistical year
Source: Defra

The UK poultry industry has been a real success story over the past decade, with poultry now accounting for 40% of all meat consumed in the UK. The highly integrated nature of the sector and significant investment in genetics to reduce production times, have been instrumental in producing what is now the most economical source of meat protein.

At the other end of the supply chain, the processing industry has also capitalised on key consumer trends, such as healthy eating, and an interest in free-range and organically produced food.

The sector has met consumer desire for convenience and versatility by producing a wide range of consumer ready and value-added products, with an inherent value for money proposition.

However, despite the cheaper shelf price, there is still a demand for good quality food with high production standards. And, as the UK produces some of the highest quality produce in the world, the industry should capitalise on this, while not becoming complacent in this area.

UK poultry production is currently around 72% self-sufficient, with the remainder being sourced largely from the continent – from countries such as the Netherlands, Ireland, Poland and Germany.

> Inflation means consumers are likely to look to poultry

As supermarkets are keen to promote British-sourced produce and with uncertainty surrounding import tariffs post-Brexit, there is an opportunity for UK production capacity to increase. However, the industry will need additional investment in both production and processing capacity, as well as further improvements in consumer marketing.

The sector is attractive to both UK and international investors, as seen by the recent acquisition of the UK's second largest processor, Moy Park, by the US-based Pilgrim's Pride. This is just one example of a UK agricultural and food market that is attractive for investment.

Almost regardless of the final outcome of Brexit, the industry should be recognising its assets and taking advantage of the opportunities for further market and supply chain development.

Farmers Weekly
26th January 2018
Genus

How a Yorkshire dairy farm boosted pregnancy rates

Increasing dry matter intake has helped convert good submission rates into higher pregnancy rates on a year-round-calving dairy, writes **Michael Priestley**

Adding troughs has improved DMIs and fertility

Doubling fresh cow trough space and regular fertility discussions between vet, farmer and breeding experts have lifted pregnancy rates by 7% on a Yorkshire dairy unit.

Pregnancy rates were averaging 18% for the year-round calving herd at Thorncliffe Grange, Emley, when farmer Andrew Parker signed up to Genus RMS.

He quickly saw conception and submission rates lift as Genus technicians oversaw heat detection on daily visits.

This soon took pregnancy rates to 20%, but attention to detail – including adding a fresh cow group – has been the key to steadily lifting this 5% further in the past four years.

"I started using RMS because I was short of staff and the extra information about the herd proved to be a real bonus," explains Mr Parker, who needs a level calving pattern for his contract with Buckley's Dairy, supplying Medina.

Mr Parker says the data uncovered some problems and resulted in practical suggestions from the Genus team on how to improve fertility.

"We were previously very seasonal in our conception rates. We had periods of very good pregnancy rates and then periods at 13-15%," admits Mr Parker. "Now I know I need five cows calving each week and if there aren't at least 10 cows in calf at each pregnancy diagnosis, we have gone astray."

These targets are now used to highlight problems.

Some of the fertility success is also down to the fact Mr Parker made an effort to feed cows well despite a milk price drop that saw him receiving 16p/litre in 2016. This kept cows in good condition and ensured they were transitioning well.

Establishing a fresh cow group

All cows are fed in feed troughs at Thorncliffe Grange, meaning time is saved on pushing up feed. However, competition at the trough was suspected to be holding back some cows, which is why Mr Parker started a fresh cow group and increased trough space.

"The fresh cow group was started five years ago when we started to address trough space in 2015 to lift dry matter intakes [DMIs]."

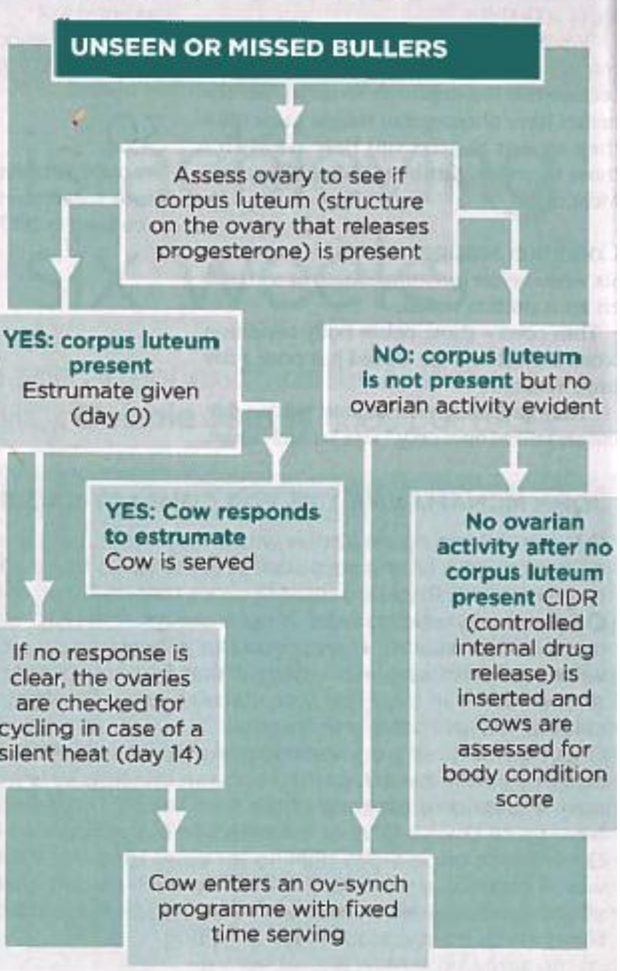
Cows enter the fresh cow group after calving

FARM FACTS

Thorncliffe Grange

- 280 Holstein-Friesians giving 8,500-9,000 litres
- 4% butterfat and 3.4% protein
- 364ha in total
- 21ha maize, 22ha beans, 140-150ha of cereal
- Bull calves fed rolled wheat and barley and sold deadweight
- Year-round-calving herd
- Milk retailed by Medina Dairy
- Farm requires four full-time staff
- Herd milked twice a day in a 16:32 Gascoigne parlour
- Cows paddock-grazed from April to October

UNSEEN OR MISSED BULLERS



and leave once they have reached 21 days in milk (DIM).

Trough space has doubled across the farm. The milking group has 60cm of trough space, and transition cows (dry and fresh) have 75cm.

The results have been pleasing, according to Huw Lloyd, Genus ABS technical services director, who says the farm's average days to first AI is 61, with a voluntary waiting period of 42 days in milk for the past four years.

"Maximising DMI through improved access to a balanced diet can reduce the risk of metabolic disease," says Dr Lloyd. "This allows cows to meet lactation metabolic demands and has positive reproductive benefits such as improving first AI conception rate."

Breeding choice

Thorncliffe Grange aims to breed durable cows, selecting bulls on longevity, somatic cell count, daughter fertility and also production, averaging +£633 profitable lifetime index (PLI) for the past 12 months.

"Good feet and legs are important too," explains Mr Parker. "We are not trying to breed anything too extreme, just an easy-to-manage Holstein."

About 80% of artificial inseminations are now genomic, with the main herd receiving four conventional semen services to Holstein bulls, after which British Blue straws are used.

Until recently, three black and white services before beef straws was the approach, but this was changed to four following an unfortunate Neospora outbreak, which resulted in the farm needing to rebuild numbers with more heifers.

The heifer rearing process sees calves transported to a nearby rearing site at five to six months old and housed in buildings with self-locking yokes. After two inseminations to sexed semen they run with an easy-calving Limousin bull before returning to Thorncliffe Grange to calve down at 23-25 months old.

Breeding protocol

Any cows that have been missed or not seen bulling are inspected to see if a corpus luteum is present.

Estrumate and an ov-synch programme is used after a 50-day voluntary waiting period, which is overseen by Donladson's Vets during fortnightly visits.

Close eye on ketosis

Any at-risk fresh cows (metritis, endometritis, low BCS) have bloods checked for ketone levels. Subclinical ketosis cases get a three-day propylene glycol treatment, while clinical cases get five days of treatment. This routine was adopted after a run of ten sets of twins in eight weeks, which put pressure on transition health.

Generally, transition cow problems are fairly minimal, with metritis cases at around 1-2%. In two years on the farm vet Matt Smith of Donaldson's Vets has only seen a couple of LDAs and milk fever has been no issue. ■

KETOSIS PROTOCOL

Days post calving	Ketone test result: subclinical	Ketone test result: clinical
<21 days	0.9-1.4mmol/litre (three days of treatment)	1.4mmol/litre + (five days of treatment)
>21 days	0.9-1.4mmol/litre (three days of treatment)	0.9mmol/litre + (five days of treatment)