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GrasslandNews

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LIC's Pasture to Profit conference is coming up next month on Wednesday October 16 at Stoneleigh Park, Warwickshire. With a stellar line up of speakers, covering productivity, profitability, legislation and TB, it's a must for any dairy farmer. Tickets are limited and selling fast so don't delay in applying for yours.

This year LIC has chosen Lincoln University Dairy Farm (LUDF) to help frame the conference. LUDF, based close to Christchurch on the South Island of New Zealand, demonstrates responsible and profitable dairy farming having executed profitable system change under enforced environmental restriction.

It might be in the Southern Hemisphere, but conditions are very similar to those found across the UK. With consumer pressure to 'clean up' environmentally, the farm has had to make significant changes while remaining in profit.

Ron Pellow, national manager farms at AgResearch NZ, who oversaw many of these changes, is heading up the first

three sessions. He will carry a strong message to farmers here, many facing tough challenges in the months and years ahead.

In the first morning session, Production Systems - where can we find the extra 10%, genetics, production, soil management and fertility will all come under the microscope. Ron Pellow will be joined by Dr Elizabeth Stockdale, head of farming systems at NIAB, and Dr Natalie Hughes, a consultant with AbacusBio. Chair for this session is Pasture to Profit consultant Piers Badnell.

The second morning session, What tools turn grass and milk into profit, again headed by Ron Pellow, features

Euryn Jones, regional director HSBC and David Homer from Chisbury Lane Farm, Wiltshire. Chair here is Pasture to Profit consultant Sean Chubb.

After lunch we move on to tackling upcoming legislation. Are you ready to ride the legislative wave is all about finding out where environmental regulation may impact you in the future. It features Ron Pellow, Paul Tompkins, NFU Dairy Board vice chair, Grace Whitlow from AHDB and Robert Thornhill from Standhill Farm, Derbyshire who completed a Nuffield Scholarship on all the different types of lower impact grazing farming. The chair is Pasture to Profit consultant Bess Jowsey.

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WHERE TO GET YOUR TICKETS

We have a limited number of tickets available for our conference this year, and they are being snapped up fast. So please don't delay and go to:

www.eventbrite.co.uk/e/pasture-to-profit-conference-mind-the-profit-gap-tickets-59824043324 to book your place.

Dinner tickets for the 15th October are **only available for those attending the conference** on the 16th October.



Our final session covers a very important area - How to work on herd improvement within a TB herd. Here we have John Bennett from the TB advisory service, joined by Ed Friend, an ex-vet, with strategies in place to manage TB on his own farm. Chair here is John Tobin, LIC Ireland systems manager.

Throughout there will be plenty of time for networking and discussion the Pasture to Profit conference is recognised for being a place where ideas are shared, concerns are voiced, and hot topics debated.

PRE-CONFERENCE EVENTS

This year, for the first time, LIC will be holding a farm walk on the previous afternoon - Tuesday October 15. Attendance at this farm walk is completely free of charge, and coaches will be leaving Stoneleigh Park for the visit - some 20 minutes from the site - at 2pm prompt. The event will showcase the very latest in New Zealand agri-technology demonstrating how to farm smarter by utilising exciting farm system changes that promote sustainability, profitability and ease of management.

Our evening dinner is only open to those attending the conference the following day. Tickets are already selling fast, which is no surprise as the guest speaker is the man just awarded the top rugby player of all time by the All Black fans themselves, Zinzan Brooke. We will be in the middle of the Rugby World Cup at this point and will be inviting conference delegates to send in their questions for the world's great player, who was brought up on a New Zealand dairy farm.

All-in-all the conference promises to be one of the most relevant dairy discussions of the year, and we certainly look forward to meeting you over the two days.

This year British Dairying is the media sponsor, and will be there throughout the event. Other sponsors, who will have stands in the foyer at Stareton Hall, and will be happy to answer any of your questions, include AHDB, AgriNet, Field Options, NMR, Gallagher and Saber.









Close well to open well says Pasture to Profit consultant Sean Chubb

For some the autumn will be signalling the end of your season, while for others it's just the beginning. It's important not to let the lure of a well-earned rest, or the chaos of calving, distract you from what your autumn planning is designed to achieve.

The most important aspect of the autumn rotation plan is to ensure that all paddocks have been grazed out well, leaving good quality regrowth come closing. This will, in turn, ensure good quality feed come spring turnout.

Any poor quality/wasted grass carried over to the spring will reduce cows' intake and/or result in cows not meeting the required residuals in their first rotation. With a years' worth of dung patches across the paddocks, this can result in cows not wanting to graze over these areas. To cover this, grazing pressure needs to be spot on. The use of supplements over this time will also influence the residuals, as cows focus on the trough over pasture.

Along with maintaining grass quality for the spring, having enough grass stored over winter is just as important. Having an early turnout in the spring not only simulates grass growth; it's also more profitable with extra profit of £2.50 per cow per day of grazing. Turning out in the spring with lower than desired covers (aim for 2100 – 2200KgDM spring block, or 2400 – 2500KgDM autumn block) will result in a slower rotation and higher feed bills in the spring.

Closing at the right cover in the autumn is essential for achieving the desired opening cover in the spring. For autumn block farmers this could mean driving average farm cover down in the autumn to compensate for growth once you have housed your cows.

At this time of the year cow condition should be on the minds of both spring block and autumn block farmers. As body condition score has a significant impact on conception/pregnancy rates, this needs to be a priority for autumn block farmers. The aim is to have a minimum body condition score of 2.5 UK or 4 NZ with no more than 15% of the herd below this. For spring block farmers there's the opportunity to put condition on before drying off. The target for condition score at calving is 3 UK or 5 NZ with no more than 15% below and 15% above this.

Finally, you should be looking to extend your grazing as long as possible to

reduce costs (feed, slurry, bedding and machinery). Spring block farmers in general have this sorted, and it's made easier with their cows being at the end of their lactation. But there are a number of autumn block farmers that believe housing their cows post calving is the best way to drive dry matter into them. Given the cows are not going to reach their peak milk production until around four weeks after calving and their peak dry matter intake is going to lag this by another couple of weeks, cows grazing good quality grass will peak just as high and do it cheaper.



SEAN CHUBB

Our infographic explained...

From the infographic it's easy to see why Jersey milk is so popular with milk buyers that process cheese. It takes nearly 1 billion litres less to make the same 500,000 tonnes of cheddar cheese. That's because of the higher butterfat and protein content of the milk, that makes the aim of matching cow bodyweight to milk solids production the aim of New Zealand producers.

Yes, the average Holstein will give a higher yield, but she also weighs a lot more, and will need more feed. The average Jersey weighs around 130kgs less, and gives nearly 10kg/day of milk less, but her fat percentage is 4.8% rather than 3.8% and her protein 3.7% instead of 3.1%. At a time when we are having to consider the environmental impact of our farming practices, the Jersey again has a great advantage. The carbon footprint from Jerseys producing the same amount of milk is 1662 tonnes less than that produced by the Holstein – and that's equivalent to taking 218 cars of the road for every 500,000 tonnes of cheddar made.

Crossbreeding gives us the cows we want

"There's a lot to be said about efficiency - if you're going to milk a cow these days, it has to be a good one."

That's the view of Tamara and Drewe Finlay who are the third generation on their 80-hectare family farm in Taupiri in the Waikato region of New Zealand.

Tamara and Drewe see the value of the crossbred cow, as they want the right cow for their system and environment. The farm carries some heavy clay soils and can be wet, so the couple aim to milk an F8J8 animal that is robust, fertile, highly productive and efficient, yet not too heavy for the soils.

"A smaller animal than a straight Friesian but larger than a Jersey - one that does the job for us," says Tamara.

Tamara and Drewe are building a herd of high performing easy care animals and for them crossbreeding is certainly paying dividends. Currently the herd ranks in the top 5% of herds nationally for Breeding Worth (BW). Their breeding policy is to produce high BW replacements with sound type, good capacity and strong udders, using a combination of Holstein Friesian, Jersey and KiwiCross® bulls.

They've recently added another criteria to their programme, breeding for A2/A2 animals, whose milk carries a premium. Like many New Zealand farmers, their aim is to match bodyweight with kilograms of milk solids yield. Tamara and Drewe's performance figures are impressive, with the herd producing over their liveweight in milk solids.

Cow numbers are around 270 with average production of 504kg MS/cow in 265 days. Liveweights average 490kg over the whole herd, with the older mature cows weighing around 530kg. They keep all heifers on the farm, selling any surplus later.

They pay close attention to feed conversion efficiency, herd testing four times a year to ensure they are milking, and breeding replacements from, the most efficient cows in the herd.

"At the moment our replacement rate is around 25%, as we've been pulling through a higher percentage to 'clean up the herd'," explains Tamara. "We used to sell around 30 surplus heifer calves (at four days old) each year, but for the past couple of years we've held on to them in the hope of selling surplus in-calf two-year-olds for some extra income. This was also a backup plan in case we had an opportunity to purchase the neighbouring farm and expand, but unfortunately that didn't happen."

This year will see them selling off the first of these heifers.

Breeding has been concentrated into a 10.5-week period and, for the first time, they've switched to AI across the whole mating period. In the past it's been seven weeks AI, followed by two weeks of stock bulls and finally 10 days of short gestation length (SGL) dairy. They're currently ranked in the top quartile of herds in New Zealand for fertility performance, with 72% of the herd calved by week three and 91% calved by week six, compared to the industry targets of 67% and 88%.

In 2018, the farm's six week in-calf rate was 78% with an empty rate of just 5%.

In the 15 years the Finlay's have run Mangahei Farms, there's been a lot of investment in infrastructure as well as a strengthened focus on feeding, breeding and culling. They've built a feed pad, installed in-shed feeding, put in drafting gates and ACRs, all to make life easier for one person to run the milking shed.

They've also invested in Novaflo™ drainage across the whole farm and 20ha run-off, and this has transformed the pasture, allowing easier management during wet periods. "Protecting the pasture is our top priority as it's our number one input," says Drewe.

"Environmental pressure on dairy farming in New Zealand is increasing all the time. I'm very confident looking into the future, but understand we are going to face challenges. As dairy farmers we need to share with the public the vital work we are doing in this space."

On Tamara and Drewe's farm all the waterways are fenced to help maintain and improve water quality. They spread effluent over 80% of the farm to help reduce fertiliser application and use soil moisture probes to decide if the conditions are right to spread the effluent on the land or to put it into the storage pond.

"The farm is covered in trees too, so the cows have plenty of shade during the hot summer. We do our best to look after the environment and our cows."

The couple have just celebrated purchasing the farm which was their main goal when they returned home from their overseas travels. Now the focus is on decreasing debt levels and continuing to improve cow production and conformation.

"We have full-time staff for the first time so we're also aiming for a better work/ life balance and, hopefully, when we can get ourselves into a good financial position, there may be a chance to expand by buying more adjoining land. If not, we're certain other opportunities will come along," adds Tamara.



DREWE & TAMARA FINLAY

Look to the future and plan herd improvement

Dairy producers across the world have a "massive opportunity" to work towards breeding more efficient cows that better suit the environmental changes on the horizon, and also deliver on profitability, fertility and health.

That's the view of Malcolm Ellis, GM NZ Markets for LIC. Malcom is a fourth-generation dairy farmer, who has supplied sires to LIC and, before becoming general manager, led the Jersey and Short Gestation Breeding Programmes.

He says that for 23 consecutive years a period of cow growth of 100,000 cows/year in New Zealand meant herd improvement didn't matter to its fullest extent, and that even poor-quality cows survived as cow numbers increased and fortunes were often fuelled by the capital gain of the land assets.

Today the NZ average herd size is 431 cows with a total population of 4.99 million cows in 11,590 herds.

"There's little point in talking about today," he says.

"We have to look to the future and put together a herd improvement plan that factors in changes expected in the next five to eight years. My concern is that we're prone to getting very emotional about some of the consumer issues facing us today, and we don't get the right balance around the long-term sustainability of our farms.

"When you can't find a solution that puts the two into balance you just have to work harder to find it."

He says he's concerned that some producers, in Ireland and in the UK, are considering making significant changes to move away from a crossbred cow and back towards a Holstein Friesian.

"Some years back I was talking to Northern Hemisphere producers who were claiming they would always be paid on litres, not milk solids. Look at how this is changing today. Here in NZ we are now seeing a rapid change in the value component ratio. Ten years ago you needed 3kg of fat to match the return from 1kg protein, five years ago this was 2:1 and today it's 1.28:1. That's a significant shift in a short time."

Last year New Zealand saw a 21% increase in the use of Jersey semen, and this year an increase of 22.7% as farmers chase the increased fat percentage that Jerseys offer, but Malcolm says he can't see the 'landscape necessarily turning brown'. Instead he observes the repositioning of the crossbred cow back to that F8/J8 sweet spot following a recent movement towards the F12 animal while Jersey matings to Holstein Friesian cows continue.

Other values from the crossbred cow include improved fertility, longer survival in the herd, improved health and the ability to make the most efficient use of home-grown forage.

For example, the NZ AI average is 1.85 straws per pregnancy with the top 25% hitting just 1.67 straws. The NZ calving interval across all recorded herds is 368 days compared to the UK figure of 422 days and the Irish figure of 391.

"NZ's average dairy cow consumes 5 tonnes of dry matter, utilises upwards of 85% grazed pasture and home-grown supplements, limiting imported feed to less than 15% and responds well to higher feed levels.

"In the 2017-18 season she produced 4217 litres of milk over 219 days giving 362 kg milk solids at 4.75% fat and 3.82% protein. On average the difference between the top quartile and the bottom quartile of all herd tested cows is 160kg milk solids. So, you can see there's a big opportunity for improvement here."

Malcolm says the aim of the New Zealand dairy industry is to breed animals that are the most efficient

converters of feed into profit, and to identify bulls whose progeny will deliver. Breeding objectives include moderate-size cows, high milk solids, sound udders, easy calving, aggressive grazing, good temperaments and milking speed, high fertility and longevity.

"We need innovative thinking as we move forwards," he says.

"We cannot allow ourselves to be driven by emotion. It's simply not correct to say that a Friesian cow is the only breed to produce a profitable calf... we just need to look harder for different solutions."

Malcolm referred to a beef opportunity now available to New Zealand farmers where crossbred cows are mated to Wagyu bulls to produce calves for a niche market. The Jersey carries the highest marbling of any dairy breed, and farmers are paid a premium on marbling in the resultant beef.

Some 15,000 Wagyu cross calves have been bred in 2019, and with a rearing time of between 24-26 months, Malcolm believes strategies like this is the kind of thinking required to create longerterm solution for farmers trying to get a better return from a more extreme dairy beef calf.

"This aligns with my overall view that farmers should be looking to drive more efficient production on their farms, and that breed selection is a key element of this decision-making process. We need to ensure this debate continues alongside a desire to remain profitable and plan for the future."



Once-a-day milking aids farm efficiency in Dorset

A move to once-a-day milking and a herd improvement policy that's relied on LIC genetics for the past 18 years is helping herd manager Gary Hawker to boost returns for JW Finding Farms on a tenanted Duchy of Cornwall Estate in Dorset.

Today the 220ha farm, with 435 milkers, is going from strength to strength, with breeding based on fertility and milk solids, and grazing forming a key part of the management structure.

"We're on a milk solids contract and sell to Wyke for cheese manufacture. Since we've gone once-a-day our butterfats and proteins have increased, and we're still getting an annual yield of 1.5 million litres," Gary says. "This change has definitely boosted our profitability, allowing our management of the farm to become much more flexible."

He explains how difficult it is to get the 'right' labour today, and says the new system, which started in April 2017, with OAD milking, means less pressure on staff and a better overall lifestyle, allowing him to effectively 'close' the farm for the two-month dry period. At the same time, the more efficient crossbred cow has boosted milk solids production and yielded better returns

Overall the farm supports around 800 cattle, with a grazing platform of 125ha. The unit is all grass, with the exception of some stubble turnips used to turn out the cattle during the dry period before calving.

"There's no shelter outside, the farm is quite open, so while the herd was mainly Holstein Friesian with a size of around 550kgs when I came, we used KiwiCross® bulls to get more Jersey and Friesian blood for the solids, and to produce a more robust and smaller cow that can thrive on our land." Spring calving, the cows calve in three separate groups, an early, mid and late. Al is used on all for the first four weeks. This means the early calvers are all AI, the mid-calvers around half AI, with a Hereford bull used to sweep up, and the later group are all put to the farm's Hereford bull. Bull calves are sold at three weeks of age through Frome market and with 190 heifer calves born this year, some 120 were retained and 70 sold on.

The six-week calving rate is currently running at about 85% with the aim of improving this to over 90%. It's still quite a young herd with all the breeding changes and challenges from TB, but Gary is pleased the cows stay in the herd for an average of five lactations and that he still has some milking well at 12 and 13 years of age.

Annual yield is some 3644 litres per cow, increasing all the time, with butterfat 5.1% and protein 4%. "We've still got a long way to go, but we're improving... we know there's room for even more and for better returns."

Managing the grazing platform has been one of the key drivers of efficiency, and while there's not much re-seeding carried out, they slit aerate the paddocks and only use between 100 - 115kgs nitrogen/ha with maximum use made of the farm's own slurry, put on behind the cows as they graze and usually amounting to five or more dressings a year.

Salt is spread to help to avoid bloat issues, and the first 60-day rotation in the early spring soon becomes a 25-30 day round with weekly walking with a plate meter to ensure the best grass is put in front of the cows.

"Our aim is to produce as much as we can from grass," says Gary. "In the drought of last year we had to up



GARY HAWKER

our concentrate use and buffer feed bought-in maize silage, but normally we would aim to keep feeding down to around 400kgs/head."

He describes the tight calving as full on for six weeks but then, once the Al is finished and the bulls go out in mid-June, the staff can relax. During the dry period from mid-December to mid-February there's time to visit his partners' family in Australia.

"About 10% of the herd is culled each year - the main decisions made for criteria such as milk solids, fertility and general herd health, high cell counts or Johnes. We select bulls with favourable traits for solids, ease of calving and fertility, and are continually trying to improve the genetic base of the herd.

"This grass-based system works well for us, even though we don't have the best or sheltered land. Looking ahead I can see the herd remaining at about the same size, our stocking rate is 3.6 LU/ha, but our yields and milk solids improving. With this will come better profitability and the whole system lends itself to easier management."



Big data will drive the market

Big data is going to drive dairy farming in the future, and it's going to be critical to the future success. That's the view of LIC CEO, Wayne McNee, who was visiting UK headquarters and farms in the early summer.

His view is that for dairy farming to stay 'at the top of its game' and continue to drive economies in a way it has for decades, farming is going to have to change, and producers will have to farm smarter.

"Farmers are rightly voicing concern about what this shift will mean, and how they will do it. We don't have all the answers today, we do know that big data will be at the heart of it.

"The next era of farming starts with taking full advantage of data. We need a full ecosystem of information and analytics to support our farmers shift from volume to value. We need to be able to provide insights to farmers, not just pages and pages of reports," he says.

"We know that access to insights will make farmers' lives easier and



enable informed decisions, driving the next wave of productivity and sustainability improvements. Agritech companies around the world are taking notice and on-farm tech innovation is moving quickly, particularly as the cost of data capture and analysis reduces."In New Zealand there's already a huge influx of data being produced from a wide range of technologies used on farms, including traditional methods such as herd testing and animal recording, more recently in shed cameras and sensors, and even more recently from satellites.

"We've made a good start but we need to do more and we need to make smarter use of the data we collect. It's what we do with the data we capture that will really make the difference."He adds that LIC alone holds more than 1 billion records of cow data showing information on inseminations, animal health, genomics and much more.

"Better and richer use of this lake of data will help develop insights that guide better decision making on farm."

Still time to enter the Cream Awards

LIC is delighted to be sponsoring the High Fertility Award at the 2020 Cream Awards for the second year in a row. Last year's winner was Sarah Baker from Dorset, seen here receiving her award from LIC's Mark Ryder. She achieved a calving interval of 363 days (at 80-100 days), a submission rate of 90% and a 6WICR of 80%.

We would love to see lots of entries from farmers who recognize the importance of fertility as part of a herd improvement plan.

LIC's sales operations manager, Tim Bunnett, says that regardless of the type of system, or whether you are year-round or block calving, getting your cows to calve as close to 365 days as possible will mean more money in your bank account. Last year the judging team were surprised by the variation in rates among the entries, and feel most producers are still not putting enough emphasis on this key element.

"With each heifer replacement reared costing up to $\pounds1500$, and three to four lactation cows at the peak of their production life, so not at a point where you want to cull, producers should be putting fertility at the top of their 'to do' lists," he says.



LIC believes fertility is one of the four fundamentals of herd improvement and says that without it, the other three are harder to achieve. He lists the other key decision factors that are the corner stone of any farm plan as:

- The cows you select to cull;
- The calves you decide to keep;
- The sires you use.

Entries for the awards close on September 30. Don't be shy, if you aren't in it, you can't win it...

The entry form and full details can be found at www.britishdairying.co.uk/ cream-awards-2020/

And, if you would like any help in filling out the form, don't hesitate to get in touch with your local FSM who can be found here:

www.licnz.com/contact_us2.cfm

Why choose LIC genetics this autumn?

LIC has embarked on an autumn sales promotion based on the belief that our skilled team of FSMs can help you to select the best autumn bulls for your herd.

Knowing full well that the mating decisions you make this autumn will impact your herd for the next generation, picking the best bull team for genetic advancement is vital. We've been doing this for the last 104 years and have helped to shape the dairy industry as farmers have faced new challenges and needed new solutions.

LIC has been selecting and bringing to the UK sires that have proven performance through their daughters in the UK environment. We have a proven track record to show that NZ genetics can play a major role in UK dairy herds.

Improve grass utilization and keep a resilient cow

With the total number of autumn block calving herds doubling in the past five years, and an increasing number of dairy farmers attending autumn calving mentor meetings, producers are looking to increase their skills on what to look for when thinking autumn block calving. You also need to look for increased knowledge in forage grown, grazed and conserved, and see what to breed to get the cows that best suit your system.

Each farmer has his or her own reasons when looking to achieve their goals, and it's not always money. For some it's labour, for others to be self-contained, or to have a better work/life balance.

But as your milk payment is the largest source of income from your cows, you'll want to ensure that you're breeding for the future. Future proofing your system with a flexible, resilient, self-contained cow as a perfect forage convertor could be the solution.

Our abiding principle is that **EVERY NEW GENERATION OF COWS**

SHOULD BE BETTER THAN THE

LAST, especially when selecting the best cows to keep in the herd, which to breed from, while letting the poor producers and the robbers go.

By identifying the strengths and weaknesses of your herd and defining the ideal breeding traits for your production system, you'll be able to match these against the bull you select from your LIC 2019 Autumn Sire catalogue.

You can then be confident that the next generation will build on the strengths of your current herd, reduce the weaknesses, and drive it towards the desired stock to support your future.

In their Autumn Sire catalogue, LIC has identified the sires with the highest merit because of the proven genetic merit from their parents over several generations. These traits include higher milk fat and protein percentages with improved efficiency associated with size, as well as complementary traits introduced from the dam of volume and feed conversion.

With the introduction of a complimentary breed from NZ, you can enjoy benefits from hybrid vigour, which delivers significant production, fertility, health and longevity gains.

This allows your cow to exhibit improved feed-use efficiency due to their lower live weight and high genetic merit, meaning they partition a greater proportion of their daily intake to milk production with less going to body maintenance.

We're here to help

Adaptability is important for autumnblock herds. Cows face feed and housing transitions during their lactation, moving between forage and mixed rations and returning to grass-only. The ideal cow will make these transitions smoothly, maintaining high levels of milk production, helping the herd to achieve a higher peak,



TIM BUNNETT

and produce more milk fat and protein through the season.

As autumn block herds will spend about a third of their lactation housed, the need for good health traits is essential, along with high increased fertility to keep to a tight calving block. Careful management and a resilient cow are required to help avoid or lessen the risk of health issues such as lameness and mastitis. Choosing bulls with good fertility, longevity and sound udder health traits should be a focus.

You'll need to get the balance right, so seek professional advice from those that can compare the bull breeding values across all the important traits. Our team at LIC knows how best to help you with your autumn sire selection and can discuss the breeding value system. They can work with you to help pick the bulls best suited to your goals.

If you would like help working out your herd's current position and/or a discussion about what progression you would like to make, please contact your regional FSM by going to our website: www.licnz.com/contact_us2.cfm. We're here to help.



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