

What's new? We round up some of the launches set for this year's two-day show. [Page 26](#)

NMR/RABDF Gold Cup finalists: we meet the six producers vying for the coveted title. [Page 28](#)



Just a handful of the gadgets and services making their UK debut

Product innovation makes animal health a priority

With the Livestock Event just days away, we take a look at the latest products set to be launched at this year's two-day show. Be sure to go see them for yourself at the NEC, in Birmingham, on July 6 & 7.

text **Ben Pike**

With the on-going pressure on the dairy industry it's unsurprising to see fewer launches of expensive products ahead of this year's Livestock Event. Instead, the trade has responded by focusing its product pipeline on efficiencies that can help producers to maximise their bottom line.

① Colostrum feeding

Following a successful launch of the Milkwave Heatwarmer in 2015, Herefordshire-based producers Gill and Alan Dickson have been getting creative again. Their Pyon Store & Thaw system helps producers to harvest, test, label, freeze and thaw colostrum quickly so it can be fed in the first few hours after birth.

It comes with two-litre bags that can be frozen and then defrosted on-demand, in just 15 minutes, in the system's water bath.

The pair say testing colostrum quality will allow producers to freeze and feed colostrum rich in immunoglobulins and the freezing

process allows producers to feed quality and quantity conveniently.

The system costs around of £1,120.

② Better grip

A simple solution for producers with slippery sloped flooring has been developed by Kraiburg. The rubber flooring has a V-shaped raised rib, which improved traction on one Welsh unit for 220 cows who walk on a 17% slope from the cubicle house to the parlour.

While the Monta is bolted to the floor, it's not suitable for areas that are cleaned using tractors with scrapers, as these will erode the raised rib.

It has an on-farm cost of £37.25 per square metre through UK distributor Kitt Agri.

③ Cleaner water

JFC has already sold 30,000 Dumpy Tip-Over Drinkers in Ireland and is now launching it to English, Welsh and Scottish producers. Costing £139, each 3.5-litre drinking bowl has a simple mechanism that dumps dirty drinking water and, using its 20-kilogramme weight and gravity, automatically snaps

back into position to be refilled in one swift movement.

About 20 cattle can drink from one bowl and JFC says the product improves drinking water quality and speeds up the job of cleaning out troughs.

④ Clever modification

A ball bearing and tiny spring may sound modest, but ADF Milking's James Duke says they will optimise the efficacy of the company's automatic dipping and flushing system.

The simple additions to the line – called a dual-injection head – now allows the system to administer dip at an angle, which improves teat coverage.

Then, with the cluster removed and the teat cup inverted, sanitiser is sprayed out of the lower injector outlet, disinfecting the liner ready for the next cow.

Mr Duke says this modified design can coat the teat using 20% less product and can be retrofitted to any ADF system.

Minimising risk

With inbreeding in the UK's Holstein herd now at 5%, AHDB Dairy is making strides to halt and reverse this worrying trend. The recommended maximum level in the UK is 6.25%, and levy-payers are being urged to sign up to a free on-line service that will alert producers to a potential risk of inbreeding before mating. It looks at data held on the dam and the sire to highlight lower-risk breedings. Herds must be milk recorded and registered with AHDB Dairy to use the Herd Genetic report.





Free tickets

When: July 6 and 7, 2016

Where: NEC, Birmingham

Free tickets: To help attract producers who have been hit by huge price drops in recent months, a free ticket to the show has been sent to every dairy farm in Great Britain and Northern Ireland.

➔ Get your tickets online at www.livestockevent.co.uk

JULY 6 & 7

Johne's tool

NML is launching a tool to help producers assess the risks of Johne's disease infection and spread in their herd. Producers and their vets fill in a simple questionnaire on current management controls from which NML creates a report. It is scored in a traffic-light system to highlight shortcomings in the herd's Johne's control programme.

A bar chart is displayed to show what the likely Johne's prevalence will be using the unit's current management plan. Reports are free for NML's Herdwise customers, or £15 plus vet costs to non-customers.

⑤ Automatic spraying

An automated teat sprayer for rotary milking parlours has been launched by Hoofcount. The sprayer detects the position of the rotary bail, senses a cow is present and then extends the sprayer under the udder. In seconds, the sprayer administers between 15ml and 18ml of teat spray without impeding parlour workers, before retracting back into position. Anthony Marsh, who developed the product, says that accurate teat coverage with a minimal amount of spray can save hundreds of pounds a month on large-scale rotary parlours. "On a 1,000-cow herd, milking 24 hours a day, the payback period is just two months," he said, adding that the installed cost is £5,000. The spray arm can operate either pre or post milking, and some customers now have both installed to reduce the risk of mastitis.

⑥ Heat detection

Northern Dairy Solutions says that its HerdInsights cow collar can detect heat with 97% accuracy.

It works by recognising gestures and behavioural activity of cattle, which are picked up by pre-programmed algorithms. It then sends an alert to the producer. It also identifies when an animal is cystic, anestrus or unwell and

sends an alert text to a smartphone app. It costs £120 per collar, with a life expectancy of five years, and producer will also need a base station to pick up the signal, which costs £2,500 or £3,500 depending on whether it's situated outside or inside.

Simple dispensing

Not one for complicated on-farm solutions, Graham Shepherd Animal Health has simplified the process of dispensing teat disinfectant and cluster flush fluids.

The iCod – or infection control on-demand – idea comprises three elements; a concentrated form of disinfectant chlorine dioxide, a concentrated teat skin conditioner, and dosing equipment. Buying in concentrated form reduces costs incurred by transporting, and packaging or using ready-mixed solutions, according to Mr Shepherd.

The pre-milking teat disinfectant costs around £275 per 1,000 litres, a post-milking disinfectant costs £360 per 1,000 litres, and cluster flush costs £25 per 1,000 litres.

⑦ Easy scoring

DeLaval says its latest 3D camera technology will take the inconsistency and inaccuracy out of body condition scoring. Once a cow passes under the camera, the system recognises the movement and selects the best still image of the cow in the video sequence. The image is then converted into an accurate body condition score.

Hugh Black from DeLaval said: "BCS can be tricky and subjective. It is not always done regularly and staff are not always good at it." He added that the technology, which costs about £4,500, takes the guess work out of the process and talks directly to the herd management system.

The system only recognises Holstein and Fleckvieh cattle at present, but is being developed to support other breeds. |



Tough choice as judges narrow field to six for industry's top award

Six of Britain's best

Six dairy units have made it into the final of the 2016 NMR/ RABDF Gold Cup competition. Tough decisions now face this year's judges as they decide who makes the best use of resources to achieve high performance and, with a strong commitment to dairying, is an ambassador for our industry.

text **Karen Wright**

This year's Gold Cup judges – RABDF chairman and former Gold Cup winner Michael King, NMR director Jonathan Davies and 2013 Gold Cup winners Andrew and Bill Higgins – will announce the winner of the 2016 Gold Cup and the runner up, who receives the NMR silver salver, on the NMR stand at the Livestock Event, NEC Birmingham at 4.30pm on Wednesday July 6.



Simon Bugler, Pilsdon, Bridport, Dorset

Simon Bugler runs the pedigree Holstein Bettiscombe herd, comprising 570 cows and 700 followers, with his parents Roland and Heather. Twelve full-time employees help to run the 295-hectare unit, with a further 142 hectares of rented land for young stock and forage. Cows are housed all year round – a move that Simon says has improved cattle health as well as lifting yields. Cases of mastitis are currently 20 per 100 cows, and somatic cell count runs at 111,000 cells/ml and Bactoscan at 6.

The herd averaged 11,260kg of milk at 3.56% butterfat and 3.10% protein on three-times-a-day milking in the Gold Cup qualifying year to September 2015. Calving interval is 380 days. Since then

average yield has crept above 11,600kg and cell counts have fallen. The Buglers believe that a 13,000kg herd average is achievable, but they would not sacrifice herd health and fertility to get there.

“We want cows that can produce milk, get in calf and maintain a good level of health throughout the lactation,” says Simon. “We mobility score the cows and the vet visits weekly. And we vaccinate for BVD, Leptospirosis, salmonella and IBR. Johne’s is also monitored and we have a control plan.”

Simon has cut antibiotic use at drying off and now up to 95% of the dry cows have no antibiotic treatment, just a teat sealant. Milk is sold to Muller on a Sainsbury’s contract.



David Irwin, Dungannon, Tyrone

David Irwin not only runs a high yielding and high health status herd, but he has also built up an enviable reputation for selling high quality breeding stock – worth in excess of 5ppl to his business.

He farms in partnership with his parents David and Sylvia Irwin and, along with two full-time staff, they run the pedigree Redhouse Holstein herd of 170 autumn/winter calving cows plus followers. The 93-hectare unit is mainly down to grass with 20 hectares of spring barley grown used in the dairy rations. The milking herd is fully housed and averages 12,300kg milk at 3.84% fat and 3.21% protein on three-times-a-day milking.

David is very much an early adopter of technology and husbandry techniques that can improve the performance of his herd. Recent investments have included a Westfalia heat detection system to improve submission rates to AI; a switch to triangular vented liners in the milking clusters to improve teat end condition; CCTV in the calving pens; and new headlock gates in calving pens to aid handling and allow milking in situ so colostrum can be fed within an hour of birth.

Overall feed costs are running at 8.5ppl against a March milk price of 21.5ppl. Milk is sold to Fane Valley Co-op.



Want to find out more about each of this year's finalists? Read a full report on NMR's website, at www.nmr.co.uk and see who you think should win the coveted title in 2016.

Brian, Sheila and Michael Yates, Castle Douglas, Kirkcudbrightshire



Michael and Brian Yates

Brian Yates has made the final for the second year running. With wife Sheila, and children Michael and Anna, he runs the 280-cow pedigree Logan Holstein herd on a 137-hectare unit. Housed all year round and fed a

TMR, average yield was 12,273kg of milk at 3.83% butterfat and 3.09% protein on three-times-a-day milking, with a cell count of 102,000 cells/ml. Impressive yields are fuelled by feeding a consistent ration and benchmarking

the performance of the herd. "We monitor the ration on a daily basis and changes can be implemented – remotely if necessary," explains Brian. "Our feed conversion efficiency stands at 1.58 litres per kilogramme of feed – well above the average for Scotland."

The herd calves all year round. In-calf rate 100 days post calving stands at an impressive 53%, with just 6% of cows not in calf by 200 days, thanks in part to their pedometers and parlour technology that helps with heat detection.

Cow health and welfare are also key to success and they have recently invested in an extra 40 cubicles to create more space. The mastitis rate stands at just 10 cases per 100 cows and the average cell count has dropped to below 85,000 cells/ml for the past 10 months.

"It's little tweaks here and there that make the difference," he adds. "There's rarely one thing that good health or fertility hinges on, but there are always things that can be improved."

Richard and Grant Walker, Thornhill, Dumfriesshire



Richard and Grant Walker

Richard and Grant Walker farm in partnership with their mother Shona and together they run a herd of 500 pedigree Holstein Friesian cows on their 329-hectare grass and arable unit. During the past four years,

since the brothers returned from university, there has been substantial investment in farm infrastructure and the herd has increased threefold. Richard and Grant head up a young enthusiastic team of five other full-time

staff. The herd averaged 10,575kg of milk at 3.88% fat and 3.33% protein on a flat-rate TMR system.

"Cow health and fertility are the key to the success of our business. If we keep the cows in good condition, everything else falls into place," says Richard. "Our rations minimise body condition loss in early lactation, because this determines how quickly cows get back in calf and reduces the risk of metabolic disorders and other health issues."

They feed a consistent TMR for the whole lactation, aiming for a daily intake of 24.5kg DM of a 17.4% CP ration based on high quality grass and whole crop silages, plus home blended straights. This provides 290MJ ME/cow/day. An impressive 62% of cows are back in calf at 100 days and the herd's calving interval stands at 382 days.

Milk is sold to the Muller Wiseman's Co-op Dairy Group and the brothers are involved in the Co-op's Farming Pioneers project.

Adrian McFarland, Omagh, Co Tyrone

Adrian McFarland farms in partnership with his wife Sharon and they have been joined on the farm part time by their eldest son Ryan, post university. They run a herd of 106 Holstein Friesian cows plus followers on their 64-hectare unit.

The herd calves from September to March and is TMR and parlour fed in winter and grazed in summer to produce an average of 8,069kg milk at 4.2% fat and 3.28% protein, with a cell count of 101,000 cells/ml. Milk is sold to United Dairy Farmers.

High annual rainfall, in excess of 1,300mm, makes for challenging grazing and forage making conditions.

“Three years ago we invested in our own forage wagon, which has allowed us to take advantage of the few dry windows in the season and to make high quality silage,” Adrian explains.

In addition Adrian and Ryan have focused heavily on improving soil fertility through extensive sampling and targeted use of fertiliser to optimise grass growth and quality. They hope that this will take them close to their target forage yield of 18t DM/ha. A combination of high D-value

grass silage and well managed strip grazing means that the herd is averaging 1,835 litres of milk from forage per cow (3,443 litres per hectare), which is an improvement of 800 litres per cow in just 12 months.

A closed herd, cows are vaccinated for Leptospirosis, BVD and IBR, as well as being routinely monitored for their Johne’s disease status through NMR’s

HerdWise scheme. A combination of a scrupulous parlour routine, with pre and post dipping, breeding for low cell count and housing hygiene keeps mastitis rates low at just eight cases per 100 cows.

Fertility performance is also good, with 55% of cows in calf by 100 days post calving and only 4% recorded empty at 200 days.

Adrian, Ryan and Sharon McFarland



Tomos Davies, Talog, Carmarthen

Tomos Davies farms in partnership with his father Glyn and mother Myrtle and runs 325 milkers, plus 230 young stock on a TMR system. The Holstein herd’s average production, for the year ending September 2015, was 12,109kg at 3.92% butterfat and 3.21% protein, with a somatic cell count of 191,000 cells/ml.

Yields have certainly increased during the past few years due to consistent feeding and a switch to three-times-a-day milking. “We added an extra milking in October 2013 and not all the team were keen. So we agreed that we’d give it a go and I said that if it didn’t work out then we’d stop the third milking on Christmas Eve,” explains Tomos. The team hasn’t looked back since – and neither has the herd. “The expected extra 10% in yield was more than 20%. Heifers are producing 30% more milk than they would on twice-a-day milking.

“Making the switch means that we’ve been able to double our output

without taking on more land,” he says, adding that they own 80 hectares and rent a further 65 hectares.

Fertility has also improved. Calving interval has dropped by 14 days in two years to 406 days, with a target of 390

days. The mastitis rate is 16 cases per 100 cows and big improvements have been made to young stock health and growth rates since they employed a dedicated calf rearer. Milk is sold to Muller Direct Milk.

Tomos, Glyn and Myrtle Davies

