

At Kingshay we are proud of the reputation we have developed over 25 years for carrying out independent trial work, helping farmers to make decisions free from commercial bias.

In this update we provide an overview of our current farm trials as well as technology development aimed at enhancing cow welfare and productivity.

> If you have any questions or would like to discuss any of our trials, please call us on 01458 851555.

Calf Jackets Tried & Tested

In response to a number We would love to hear from you about your experience member queries of using calf jackets, what set-ups and situations you of Technical been carrying out a 'Tried market. The results will industry. be published in a report

about the efficacy of use them in and how successful you have found them. calf jackets, Kingshay's Could you could take the time to complete a short Team has survey at <u>www.kingshay.com</u> sharing your thoughts and experiences? Even if you do not use calf jackets, it would & Tested' trial, comparing be great if you could answer the first 2 questions as this different makes on the will help us to get a picture of the level of usage in the

Deadline for the survey is the 30th June 2015 and every towards the end of the completed response will be entered into a free prize draw to win an iPad mini!

summer, in preparation for next winter.

HowsMyCow 3D Imaging Technology

University of the West of England are jointly developing technology that will transform the way that farmers will be able to monitor cow body condition, weight change and mobility.

The daily 3D imaging of every cow in the herd is totally non-intrusive, requires no additional labour and is immediately available to herd managers to aid in the daily management of the herd.

HowsMyCow technology will enable you to:

- Detect mobility changes earlier than the most skilled stockman
- Analyse individual or groups of cows' body condition changes on a daily basis to help determine nutrition requirements, health warnings and fertility indicators
- Monitor weight by group or individual cow to monitor changes at crucial stages in the cow's cycle

Kingshay and the Bristol Robotics Laboratory at the Using the technology continuously and acting on the information that it generates will lead to:

- A reduction in herd lameness
- Increase feed efficiency
- · Improve cow health
- Enhance conception rates

We are now half way through this exciting 3 year project. More information will be provided

> to members as the project progresses.

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Demonstration

Cubicle

Unit

The cow housing demonstration unit was set up at Bridge Farm in 2004 to assess the relative benefits and weaknesses of a wide range of commercially available cubicle equipment. The unit is familiar to many members who have taken the opportunity to visit and discuss the work that we do with cubicle design and mattress assessment. This has helped many farmers make decisions on new equipment, as well as take home ideas for design changes of existing systems. The unit currently has 17 different makes of cubicles and more than 20 mattresses.

Using all of the knowledge gained from assessing cubicles, Kingshay have developed the M2M cubicle which aims

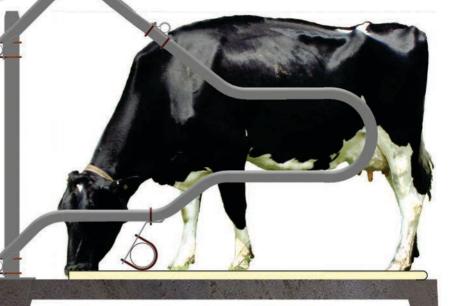
to maximise cow lying times whilst optimising lying position. This is a patented design and marketed by GEA Farm Technologies and can now be found on farms across the UK.

An updated report on cubicle performance will be sent to members this summer. To view the unit and discuss the pros and cons of the different types, phone the Technical Team.

'Foliar Feed for Grass' Trial

Research from New Zealand suggests that less fertiliser needs be used to achieve the same grass yield, if the product is dissolved in water and sprayed onto grassland as a foliar feed. We are testing this concept using New Zealand equipment, supplied by Tow and Farm UK, which dissolves granular fertiliser enabling it to be

easily applied as a foliar feed. Trials currently being undertaken are comparing grass growth between foliar and conventional fertiliser applications.



The DASIE Project

As part of an Innovate UK funded syndicate Kingshay is working alongside IceRobotics, Harper Adams University and Dairy Crest on the DASIE project. The project is focusing on the integration of on-farm technology from multiple suppliers as well as the continuing development of the CowAlert technology, which is used for heat detection and other health parameters such as lameness.

Data from this project focusing on herd activity in different farm systems will ultimately be available to members.

Slit Aeration

Surface compaction in grassland is linked to poor root development and plant stress. Slit aeration has been shown to reduce run-off but little evidence exists to prove the effect of aeration on grass production in the short term. We've now finished measuring spring growth rates at 7 different sites after spring and/or autumn slit aeration and are taking soil samples to see if aeration has given any benefit.

Red Clover Monoculture Trial

In response to the introduction of the Basic Payment Scheme and the requirement for qualifying cropping, this spring Kingshay has drilled a new red clover trial evaluating different varieties as a monoculture and as part of a hybrid grass mix.

The trial includes single variety reps of AberRuby, Corvus, Merviot and AberClaret as well as combinations with hybrid ryegrass. This trial will be ongoing for at least the next three years and members will receive regular updates of yield, protein and energy content.

Maize Trials

Kingshay maize variety trials this year include 30 varieties, some of which are specifically marketed for use as AD feedstocks as well as for forage for livestock. The differences are subtle and choice will depend on the end requirement of the grower in terms of the crop's nutrient balance. Also on trial is the duo maize concept, where two different maize varieties are drilled in alternate rows. This is claimed to increase crop yield and potentially milk production when fed, so we will be comparing the nutritional analysis of the combination with those of the two varieties grown separately.

Catch Crop Trials

Catch crops can allow cows to be kept outside for longer and provide a cheap source of compared forage bought-in to feeds. Last summer's turnip explored the trial pros and cons of bulbing vs leafy turnips. This year we're mixing it up and testing turnips against forage rape and rape/kale hybrids. This will of course be another grazing preference trial, as a big yield is one thing, but cows wasting a large proportion means a lot of energy is left in the field.

Give Your Cows the Grass They Prefer

All of our mixtures are based on our independent grazing preference trials using commercial dairy cows.

Increase milk from forage
 Maximise grazing potential





Wholecrop Additives Trial

Increasing use of wholecrop in dairy rations has highlighted the need to test additives that potentially aid the stability of the ensiled crop reducing moulds and quality breakdown at feed out. Wholecrop is preferred by many as an alternative starch source to maize but it can be difficult to manage and many farmers have been reporting high wastage from last year's crop. Are additives the answer and if so, do you go for an acid, inoculant or salt preservative? Results of this year's wholecrop additive trial will be published to members later this year.

Grass Variety Trials

We now have long-term grass variety trials in their first, third and fifth years of growth, comparing different diploids and tetraploids, hybrids and perennials. Clear differences are developing in terms of winter persistency, rust resistance, and yield, but most interestingly, grazing preference. The Bridge Farm cows are consulted on the palatability of the different varieties with every grazing rotation, leaving their scores as graze-down residual.

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Forage Costings Report

One of the key drivers of dairy farm profitability is maximising milk from home grown forage. The greater the percentage of forage in a ration, regardless of the desired cow performance, the lower the cost of producing a litre of milk is likely to be.

Kingshay's annual Forage Costing Reports are a key component in the planning process to decide on the most suitable crops for your farm's conditions and feed requirements.

The 2015 report embraces the new 'Greening' requirements for the Basic Payment Scheme for 2015, and also includes a guide to crops for Ecological Focus Areas. Costs of production are always changing and the 2016 report will be with members towards the end of this year.

The 'Cows In or Out?' Survey

With milk price volatility, producers now more than ever need to closely monitor their production costs and evaluate their system efficiencies. With farmers making business decisions based on their own particular circumstances and information sources, it is useful to see what the consensus of opinion is on what needs to be done, and what is being done, to reduce costs and maintain profitability.

Our recent survey looking at production systems in the UK received nearly 500 replies. This has provided a snapshot of dairy systems, looking at current trends as well as farmers' plans for the future in terms of management and farm infrastructure, reflecting where the industry is now and where it will be in 5 years' time. One clear message from the data was that many farmers are focusing on conserved forage production and grassland utilisation management to reduce costs, regardless of system or breed. Improving the quality of forage is one of the key ways of reducing feed costs and improving margins per litre.

> All of the results of the Cows In or Out? Survey will be published in a report, coming soon.



Dairy Costings Focus Report

This annual technical report highlights key performance trends from herds using Kingshay's Dairy Manager costings. It's not so much the dairy system chosen or where in the UK a farm is based, but how well the herd is managed when it comes to maximising margins. Comparisons on herd size or milk yield bands to a margin over purchased feed level show little difference in margins, however improvements in milk from forage and feed efficiency could help lower costs of production.

Using March year-end figures, this report includes:

- An in-depth analysis of milk & feed prices plus other farm commodities, such as fertiliser & fuel.
- Analysis of health & fertility factors plus the main reasons cows leave the herd.

Dairy Costings Focus

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- Regional trends
- Trends over the last
 10 years
- Organic & Channel Island results

The fourth annual report is due out at the end of June.



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