

News

Providing practical support to professional producers

THE UNCOMFORTABLE TRUTH ABOUT COW HOUSING

Poor housing costs many dairy producers a lot more than they think. Whilst no environment is perfect, large gains in profit can be made by providing the best possible conditions for your cows.

Many farms' cow accommodation has not kept pace with their larger, higher yielding cows and where facilities are not ideal stress, lameness and mastitis increase, and fertility declines, leading to an increased culling rate and decrease in milk yields.

One of the key areas for the comfort is the time spent lying down, the greater the lying time the more milk produced. The graph shows that a cow can give approximately 1.5 litres for every extra hour of lying time.

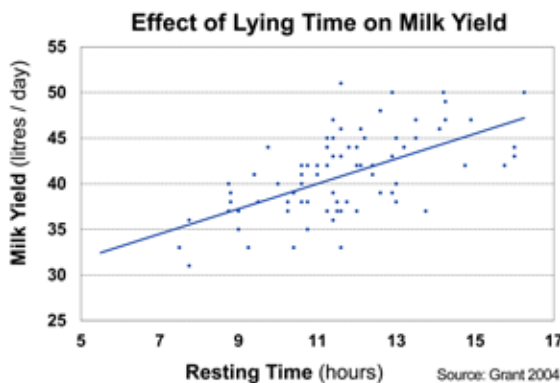
Lying down not only encourages cudging and rumen digestion, resulting in more milk, but it also reduces lameness. A cow with sore feet resulting from too long standing and walking on poor concrete surfaces will lose her rank within the herd, change her eating patterns and lose weight, which can lead to lower fertility. This will seriously impact on her ability to survive in a modern

dairy system.

Poor cubicle design or incorrectly fitted cubicles can prevent cows from utilising the time available for resting. Not only is it important to encourage lying down but making sure the lying area has a low bacterial load is crucial. A poorly managed cow bed as well as buildings with inadequate ventilation will lead to an increased incidence of mastitis and high cell counts.

So what is your cow's comfort costing you?

For the average UK dairy herd lameness costs 1 ppl in lost milk production, mastitis costs 2.2 ppl and infertility costs 1.2 ppl for a 5% increase in calving interval, so on average more than 4 ppl, or £32,000 for a 100 cow herd.



Now is the time to prepare for next winter. Improvements to cow accommodation often only require time, with little if any additional capital.

Come and speak to us at the Livestock show at the NEC, or contact the Kingshay technical team, for more information on improving your herds comfort.

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New team member

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RECENT MAILINGS

These are the Farming Notes sent to our farmer, vet and consultant members between January and March. Members receive twice monthly mailings by post and email and can also access technical information in our members area at www.kingshay.com Call us for your password.

Complementing early spring grass

Spring grass is an exceptionally cheap but variable commodity, which often needs balancing to get the most out of it.

Reducing bTB transmission on farm

The spread of bTB on farm can potentially be reduced by adopting certain management practices.

Bovine TB - The latest figures and the legislation associated with it.

A2 milk - a2TM is a branded milk product owned by the A2 Corporation (A2C).

Milk protein - Often has greater financial benefits than butterfat, but is less variable and harder to manipulate.

Sheeting the clamp - Using the appropriate cover for your silage clamp is integral to achieving a well sealed clamp and is critical to reduce DM losses.

Red clover - Probably the most reliable source of home-grown protein

Effective grass silage fermentation

Reduce nutrient loss and help to improve aerobic stability once the clamp is open.

Controlling summer mastitis

Suitable parlour routines are essential to maintain udder health in the face of exposure to environmental pathogens.

Plus the usual Monthly Checklists.

FARMING NOTES from Kingshay SHEETING THE CLAMP

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Encourage your friends & neighbours to join - the more members we have, the more independent work we can do for you.

CUBICLE MODIFICATIONS

Incorrectly set up cubicles can lead to increased lameness, injury and mastitis leading to reduced production and fertility and therefore increased vet costs.

Observing cows in the cubicles will demonstrate how well they are working and how the cows are integrating with them.

Cows perching on cubicles, lying diagonally, reluctant to spend time lying down, lying backwards, getting stuck or leaving dung on more than 5% of bed ends - all indicate wrongly set up cubicles. Cows should spend approx. 14 hours per day lying, with less than 10% of resting cows standing and minimal hock or knee damage.

Some relatively simple and cheap modifications may alleviate these issues;

- Identify the animal size through animal height and width. This should then give an indication for cubicle length, width, neck rail height and bed length.
- Brisket boards to stop the animal from lying too far forwards should be rounded and only 4 – 5 inches high and will help improve bed cleanliness.
- Neck rails need to be at an appropriate height and also at

the right distance into the cubicle. These may be adjustable or require altering through options such as 'swan necks' which are extensions to raise rail height. Correct neck rail positioning will prevent perching and encourage animals to stand and then lie in the correct position.

- Inadequate lunging space will increase the number of cows getting stuck and can be identified through diagonal lying or standing or dog sitting. Resolving this may require removing walls or rails restricting space, or ensuring there is enough space for side lunging.
- Wide cubicles may lead to animals getting stuck, lying backwards, diagonal lying or diagonal standing. Ideally cubicles may be unbolted and moved. Where this is not possible, ensure other adjustments are made and/or hang tyres for heifers or smaller animals to reduce the width.
- Uncomfortable beds due to poor or old mats/ mattresses may be identified simply by kneeling on them and if they feel uncomfortable to you, they probably are for the animal too. These either require renewing or using adequate levels of appropriate bedding.

For more information read our Farming Note on Cubicle Modifications, see us at Livestock 2013 or come to see the cubicle demo unit at Bridge Farm



MAIZE PROGRESS REPORT

We are in our thirteenth year of maize variety trials, looking at a range of varieties under practical farm conditions over a number of sites. This year we have 38 different varieties including the best of traditional, new and a number of as yet untested varieties to build into our accumulative database of maize

seed success rates.

Drilling was successfully completed in a number of locations around the country in late April/ early May. Despite the cold late spring, the crops are up and approaching early vigour scoring. The crops will be harvested and analysed to go in our report to members.



This article is written by corporate members GEA Farm Technologies.

Together with Kingshay we have revolutionised cow comfort with our new made-to-measure cubicle system – the M2M. The M2M cow cubicle is a patent-pending design, tested and developed by Kingshay, the Independent Dairy Specialists, to augment our Royal De Boer range.

Duncan Forbes, Managing Director at Kingshay, said: "The M2M design was developed after extensive research into the key elements that make a comfortable cubicle, including clear forward lunging space and a neck rail that can be adjusted to the size of the cow."



The unique 38° angle provides simultaneous adjustment for both height and length and allows optimum space for cows to lunge forward and sideways as they go in and out of the cubicle. As cows get bigger they not only get longer but

also taller so the unique sloping top rail of the cubicle division ensures that the neck rail can be positioned proportionately at both the correct distance from the heelstone and the right height above the bed for the size of the animals.

The M2M not only provides superior cow comfort by providing the best positioning for the cows while lying and standing but its flexible design means it can be used in any situation making it the first choice for deep litter or mattress bedding systems.

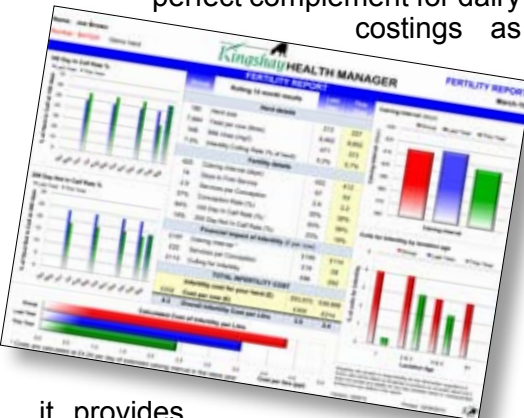


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HEALTH MANAGER

Kingshay's Health Manager is the perfect complement for dairy costings as



it provides fundamental information for longer term profit. Vet bills, lost milk production, culling rates & reduced fertility all have major impacts on future output and costs.

Health Manager allows the farm to analyse the greatest losses through health & fertility, highlight areas for improved management and provides clear feedback of management changes to reduce these losses.

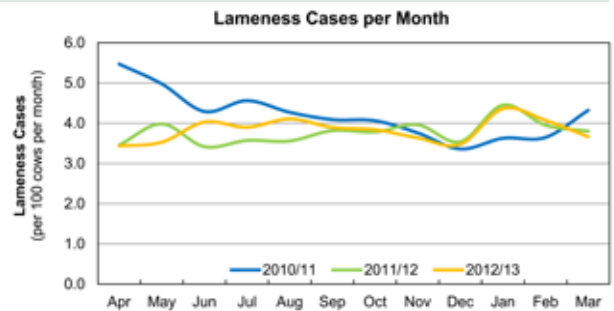
Health Manager displays results in a clear and easy to see manner, allowing comparisons with other similar herds. Health Manager provides true performance indicators and helps drive long term improvements.

Call us on 01458 851555 for more details.

LAMENESS CHALLENGES OVERCOME

Results in the new Dairy Costings Focus Report 2013 show lameness cases to be 5% lower than the previous year, but still too high at 46 cases per 100 cows. But the reduction has been achieved despite challenges with the weather on the grazing season and forage quality. The graph opposite looks at incidences of lameness over the last 3 years and shows 2012/13 follows the previous year closely even though summer months are slightly higher.

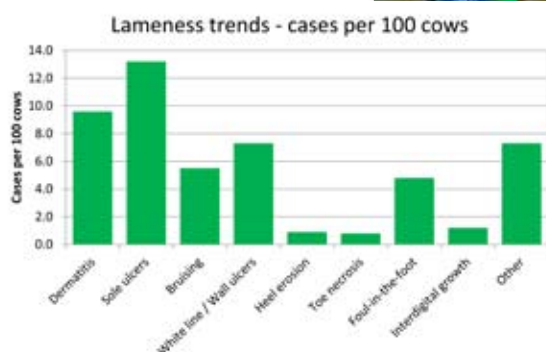
Sole ulcers account for 26% of lameness incidences and dermatitis 19%. These results come from herds using our Health Manager service which includes specific reports on lameness,



mastitis and fertility.

The lameness report calculates the financial impact of lameness for your herd, taking into account loss of milk production, replacements due to culling for lameness issues, cost of medicines and time spent foot trimming & treating cases.

The charts on the report highlight key trends & areas to consider for improvement alongside comparisons to the Kingshay group average.



The Dairy Costings Focus will be published in early July and sent to all members. Call us for a copy.

WINTER BEDDING OPTIONS

Straw may be in short supply this year due to a reduced winter wheat area planted combined with poor early growth, potentially pushing prices up for the winter.

Although cubicles have a wide range of alternative options available, loose yards require more bedding per head and there are fewer known alternatives to wheat and barley straw.

Key points are;

1. Forward planning is essential for sourcing bedding to ideally know where it is coming from and how much it will cost so accurate assessments of alternatives can be made. Weather is the vital unknown ingredient for straw harvest as this will dictate the quantity and quality available.
2. Look after straw supplies well



through minimising losses during storage. There can be up to 20% losses on a 10 bale high stack – from the top and base layers.

3. Maximise utilisation efficiency through possible bedding additives, effective barrier dips and consider which animals require which level of attention.

4. Consider alternatives.

- Rape, bean and pea haulm straw

- Canary reed grass
- Sand
- Miscanthus
- Wood chippings
- Pack bed; shavings or fine sawdust
- Soil/composting
- Peat

Your choice will depend on; location, yield, breed, animal age (calves require warmth to reduce pneumonia and associated problems), stage of lactation and practicality (sand requires removal of dung manually twice daily, other bedding requires maintenance such as turning over).

Our stand at Livestock 2013 will have a range of bedding materials for you to discuss with the team. See you there!

ANIMAL IMMUNITY VS DISEASE RESISTANCE

Disease incidence on all levels is dependant on two basic factors. The level of disease challenge & the level of the animal's immune status.

A stronger immune status will be able to cope with a greater disease challenge. A high disease challenge combined with a poor immune status can often be fatal for the animal.

Disease challenges can include;

- Mycotoxins and other dietary poisons or toxins
- metabolic issues caused by nutritional supply and demand
- bacterial loading from environmental conditions causing e.g. mastitis
- viral or bacterial loading from other animals for infectious diseases
- pasture worm burdens

These are often easier to target and can be the main focus for disease control management.

Immune status is all about the animal's ability to cope with disease. This will be affected by the level of stress the animal is under,



acquired immunity & natural immunity. Stress can come in many forms and suppress the immune system through neurological, hormonal and physical means.

Stressors may include;

- Historic nutrition levels and body reserves
- Current nutrition (adequate feed and water)
- Metabolic stress
- Social stress – separation anxiety, bullying
- Handling techniques
- Environmental stressors (ventilation, cubicles, bedding, floor surfaces & tracks etc.)
- Poor cow comfort

Physical barriers such as hooves, skin and sources of entry for infection, such as teats, need to be healthy.

The individual's immune status is also heavily influenced by nutritional requirements to work effectively and this includes;

- Energy supply vs energy demand
- Vitamin and mineral levels

- Anti-oxidant levels
- Pro-inflammatory omega 6 and anti-inflammatory omega 3 levels

The bottom line though is prevention is better than cure.

See our recent Farming Note on Improving Immunity.

NEW TEAM MEMBER



Emma Wright has joined us as an Assistant Technical Specialist. Emma has a Bachelor of Veterinary Medical Sciences degree from

Nottingham University so approaches work here from an animal health background. She starts a masters in Animal Nutrition later this year to develop her skills as a cattle nutritionist.

