

Selecting cattle with ease

Calving ease index will improve cow health, fertility and welfare

Work to produce a calving ease index to aid UK producers when selecting bulls, began last year. It's just part of a wider 'Expanding Indices' project that's set to help improve the health, welfare and longevity of dairy herds.

How many sleepless nights have you spent dealing with difficult calvings? And what about the cost – both to the cow and your business – of the 'aftermath', which often includes retained placentas, uterine infection, milk fever, low milk yields and general poor health and fertility. "The knock-on effects of a poor calving are usually much greater than the immediate costs, such as vet-and-med fees, additional labour and possibly a dead calf," says SAC geneticist Dr Eileen Wall. "If a cow or heifer has a difficult calving then it's off to the worst start possible to having a healthy and productive lactation. And the following lactation is also in jeopardy since fertility can also suffer. "Ensuring that a cow or heifer has an easy calving gives her the best chance of having a low cost and productive lactation and being pregnant on time – not to mention many subsequent, and equally productive, lactations." Dr Wall says that it's not unusual to look back through a cull cow's latest lactation history and find a difficult calving at the start. "A bad calving can in many cases lead, directly or indirectly, to involuntary culling."

Initial phase

And it's for all these reasons that a three-year project called 'Expanding Indices' has been set up. Its initial phase, to developing a calving ease index, began in April 2008 and is set to conclude in April 2011.

"Many countries already have a calving ease index. We want to develop one for the UK that allows producers to easily compare bulls with one another and ranks them on the same footing," say Dr Wall.

At the moment the only bulls in the UK that have a calving ease evaluation are those progeny tested by Cogent and Genus. And these figures are not comparable or sent to Interbull – they're only used when selecting sires to return to AI within each stud.

The project encompasses all the bulls that are available in the UK and will look at paternal calving ease – how easily a calf sired by an individual bull is likely to emerge – as well as maternal calving ease, which is how easily a

Easy does it: a trouble-free calving helps the cow on her way to a healthy and productive lactation

'Sweep' to index other traits

'Expanding Indices' is a LINK project funded by DEFRA, the Scottish Government and HCC in collaboration with NMR, CIS, UDF, SAC, DairyCo, HUK, Genus, Cogent and the Roslin Institute. It aims to bring the UK in line with the rest of the world and help producers to breed cattle that are easy to look after and efficient. "The Robust Cow project was just one step towards that goal and this project is the next step," says

Dr Wall. "We're 'sweeping up' the other traits that are key to cow health, fertility and welfare." Once work on developing a calving ease index is complete, the collaborators will turn their attention to udder health. Work on that project is scheduled to start in summer 2009. This will be followed by work to produce a revised lifespan index in late 2010. All work should be completed by 2011.

heifer or cow sired by a particular bull is expected to calve. "And we'll be looking at the still birth rate too – both paternally and maternally – as this has a significant economic impact on dairy businesses."

Looking at the data compiled so far, it seems that around 3% of cows and between 5% and 10% of heifers experience difficult calvings, according to DairyCo's breeding+ director Marco Winters.

Compare bulls

"Difficult calvings are a significant drain on costs and resources for UK herds and, as yet, there is no easy way to compare bulls from across the world for calving ease. This project sets out to change that," he says.

So far data has been collected from NMR, UDF and CIS and an index, drawn up from this information, is expected to be delivered to the project sponsors in April 2009. The index will be reviewed. "And then, once everyone is happy, the national evaluation will be passed to DairyCo breeding+, who will ensure that the information is passed on to producers and breeders," adds Mr Winters.

The index will stand alone for a while and then eventually, once the industry has got to grips with it, it will also be incorporated into PLI and proofs will be adjusted. "It's great news for the industry. Using breeding as a tool to help prevent calving difficulties offers huge cow health, fertility and welfare – as well as economic – benefits," he adds.

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