

Using Behavioural Science To Improve Farm Animal Well-Being

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People lie at the heart of farm animal well-being. As the decision makers when it comes to diet, housing, management and disease prevention and treatment, the behaviour and choices made by those on the ground weigh heavily on the outcome of good or bad well-being.

With this in mind, this year's 12th annual Boehringer Ingelheim Expert Forum on Farm Animal Well-Being, which was held in Prague last June, brought together more than 100 delegates from across the globe. They were invited to share their knowledge, understanding and the latest research on farm animal well-being - with a specific focus this year on consumer perceptions and expectations regarding animal welfare.

To hone in on the expertise of those in the room, the afternoon session of the forum saw delegates take part in an interactive workshop to gather thoughts on behaviours that impact farm animal well-being and how this could be altered in order to boost welfare, led by Cambridge-based innovation consultants, Innovia Technology.

The workshop began with an introduction into the concept of behavioural science, delivered by Innovia's Dr Anna Wilson and, Dr Katie Morton.



"Understanding human behaviour is challenging. Behaviour is complex, and often seems inconsistent and irrational. Also, people don't always do what they say they do," said Dr Wilson. "Behavioural science is an evidence-based, scientific approach which overcomes some of these challenges.

"It is the systematic study of how humans behave individually and with each other. It encompasses fields such as psychology, behavioural economics, sociology and anthropology."

Interactive approach

While implementing a behaviour change programme is usually a complex process that takes several months to complete, at this year's annual Forum, delegates were given the opportunity to create a condensed version.

Working in small groups, participants were tasked with identifying factors that impacted on farm animal well-being, exploring what behaviours were associated with those factors, selecting a specific behaviour from that list, exploring and selecting a possible intervention and, finally, describing how a change in behaviour would be implemented.

Outcomes

To get creative thoughts flowing, participants first gave their views via polling software on the following questions, which helped generate some general trends to focus on throughout the workshop.

What factors have the biggest impact on FAWB?

A total of 47 distinct factors were identified. Three quarters of the concerns fell evenly into the following three buckets: 1- People (including determinants, behaviours and unclear references to people); 2- husbandry; and 3- health outcomes relating to farm animals.

Farm management and farm animals' internal states made up the rest of the issues. For individual factors mentioned, lameness was most frequently referred to, followed by pain, housing, farmers, management, knowledge and handling.

How high do these factors rate in terms of economic impact?

Lameness had the highest combined impact of all factors mentioned - being noted eight times, with almost all teams rating it high in terms of farm animal well-being and economic impact.

Farm management was also seen as a critical factor (mentioned 17 times overall) as well as housing conditions, which was highlighted 10 times in total.



Which factor would you focus on in terms of implementing a behaviour-change programme?

Each team was asked to select a factor to focus on for the behaviour-change programme part of the workshop.

Between the 12 teams, the following six factors were selected to work on:

• Husbandry/farm management (4 teams)

- Lameness (3 teams)
- Stocking density (2 teams)
- Nutrition (1 team)
- Mastitis (1 team)
- Calf health (1 team)

Causes and consequences

Out of the six factors selected by delegates, each team was then asked to identify the behavioural causes and well-being related consequences of the selected factor.

Lack of knowledge was not the only behavioural barrier, however, and cost and time pressures were also deemed as significant issues which were likely to attribute to a downfall in farm animal well-being.

Having launched at the annual FAWB Forum, the project will be developed over the coming months by the core Boehringer and Innovia teams, as well as drawing on views from farmers and veterinarians from across the globe to develop a behavioural change programme that will revolutionise attitudes towards farm animal well-being.

"The preliminary research, gathered from our delegates at the FAWB Forum, has produced some really fascinating results," says Dr Goby. "Over the coming months, we'll be focusing on the real issues experienced by the real people on the ground and look forward to being able to create something that will really help shape the future of farm animal well-being."



Key behaviours that came up across the six factors included late detection, lack of communication and not following procedure, which helped further steer the debate and allowed the teams really to hone in on exactly where well-being is falling down on farms, as well as giving them the opportunity to consider how such behaviours could be changed.

Designing a programme

With all the contributing factors considered and evaluated, delegates were then able to formulate a behavioural change programme

When it came to deciding upon the intervention that would be put in place to change the negative behaviour, the need for more training was flagged up by the majority of teams.

Further collaboration

Though the workshop was very much a whistlestop insight into the complex procedures behind designing a behavioural change programme, it was incredibly valuable and marked the start of a revolutionary collaboration between Boehringer and Innovia.

"The ultimate goal of this partnership is to develop a behaviour-change programme that improves cattle well-being by changing vet and/or farmer behaviour. The project has a novel and ambitious scope, and the potential to have a big impact on animal well-being," adds Dr Laurent Goby, Global Head of Technical Service at Boehringer Ingelheim.

For more information about this forum and past events, visit:

www.farmanimalwellbeing.com

