



Igenity®  
Dairy



## Use data to select your best future cows

Making the best use of the genomic information about the females in your herd will help improve the productivity, profitability and sustainability of your business. Cow Management has joined up with Neogen, a leader in the genomic industry, to help you understand how straightforward and cost-effective it is to utilise this technology.

Laboratory manager Donna Merrylees and customer services manager Scott Brown



Timely and complete data are the basis of better decision-making to improve farm performance. This is no more than when making the decisions about which calves to invest in, to breed and rear to be the foundation of your herd moving forwards. Carefully choosing heifers for rearing will maximise genetic progress while minimizing the expense of raising calves that won't make a significant contribution to the herd. Two things are essential to make the best decisions. The first is a genomic assessment of every calf, identifying those with the best genetic merit. The second is knowing the BVD status of the calf so you do not incur costs rearing BVD-positive animals. And you need

this information as soon as possible after calves are born. Genomics enables you to understand the DNA of an animal and this allows you to really assess how good she will be. Different areas on the DNA are associated with the positive and negative traits that will influence how good an animal will be.

### Complete picture

Genomics will help you predict how well a calf will perform when it enters the herd and how it compares to the other animals in your herd. This lets you identify the best, rank your animals, putting you in greater control of your herd.

To help you get a full picture of every calf, genomics testing specialists at Neogen are the only UK company able to provide genomic and BVD testing from a single sample, making the process as swift and straightforward as possible. Formed in 1982, Neogen provides genomic tests for dairy and beef cattle, sheep, goats, pigs, fish and domestic pets. It works closely with governments and commercial food companies. In 2022 it tested more than 5.5 million genomic tests globally across all species. Operating from its dedicated facility in Ayr, on the Scottish Coast, which was opened in 2015, Neogen provides an exceptional level of service to farmers ensuring a rapid turnaround of results with full traceability and technical support available to help make the best of the results. When farmers contact the company, the first person they will speak to will be one of Scott Brown's customer services team. "When a farmer first calls, our objective is to make sure we understand their requirements clearly and get their account set up so they can start testing quickly and we are ready to handle the samples when they come in," Scott explains. "Our dedicated support team, comprised of seven members, is predominantly from farming backgrounds. They are equipped with the expertise to guide farmers through every step of the process. While some callers will have experience of genomics, others will need to have a full explanation."

### International standards

"Some farmers want to dip their toe in the water, testing just a few animals. Some want to genomically test the whole herd, while others want BVD testing as well. As genomics is a comparative tool, it is important that enough animals are tested so we are happy to advise on the percentage of the animals on farm to test and arrange for the test kits to be sent." When samples are returned, they come under the care of Laboratory Manager Donna Merrylees and her dedicated team of 40 professionals. The lab is operated to meticulous standards with BVD, and genomic testing accredited to UKAS ISO 17025, the international standard for testing laboratories, while the BVD results are also recognised and accepted by BVD Free England and Scot EID eradication schemes. All samples are logged in and given a unique ID ensuring full traceability. Samples are quality control checked and allocated for testing. Where samples are to be BVD tested, this is done first. If the calf is BVD positive,

genomics testing is put on hold and the owner is contacted to see if they still want to proceed with genomic testing. In most cases BVD+ animals are not genomically tested. "All BVD negative samples and samples just supplied for genomic testing go through a process of DNA extraction and purification. The next stage is genotyping where the DNA is amplified and processed on a custom Neogen microarray to give hundreds of thousands of individual DNA points, and it is these that are analysed by our dedicated analysis laboratory to give the individual traits that are reported back to the farmer.

### Rapid turnaround

"We are receiving an increasing number of samples, but our objective is to get them processed and results back on farm as quickly as possible, with a turnaround of just a few days for BVD and couple of weeks for the genomic testing. This is helped by having all the testing on one UK site," Donna says. Sending the results back is the responsibility of the customer services team. Each customer will have a dedicated team member who is the prime point of contact thereby allowing good relationships to develop. "The results are evaluated according to the AHDB standards," adds Scott. "They give an accurate picture of how good the animal will be looking at the traits all identified by the UK evaluation. These include production traits including milk

yield, milk constituent yield and percent and £PLI. "Igenity also gives management traits such as fertility index, temperament, ease of milking, somatic cell count, locomotion and condition score plus a full set of type traits. One test gives you a complete picture of a cow." Scott explains that the results are uploaded to an online portal making it as easy as possible to access and analyse the data. "The data are only as good as the use that can be made of it, which is why we focus on making the results easy to understand. "The customer services team is here to help farmers make the best use of the data, either on the phone or by arranging a visit from one of our technical specialists." Neogen are setting the standards for providing the best data to plan your future breeding decisions. The combination of genomic and BVD testing from a single sample, combined with rapid turnaround of easy to interpret results means better breeding decisions and an improved return on the investment in rearing replacements.

Scan the QR code to read the first article in this series. For more information please call 01292 525 600 or email: [neogengenomics@neogen.com](mailto:neogengenomics@neogen.com).



Genomic and BVD data will help ensure farmers only invest in the best calves

