Breeding indexes provide a much-needed

Sorting the whe

We find out more about the latest index introduced by AHDB Dairy to help autumn-calving herds more easily identify bulls that will produce fertile daughters that perform well on winter rations.

text **Rachael Porter**

By his own admission, AHDB geneticist Marco Winters says that the spring-calving index received a mixed reception from spring-calving herd breeders. But the organisation listened to industry feedback – namely that the spring-calving index (SCI) rankings were 'unnervingly' similar to the PLI rankings – and have since revamped how the index is calculated to show a greater difference between the two indexes.

"This has given spring-calving herds more confidence in the index – we've had good feedback about the changes. We learnt from this experience when developing the autumn calving index, which was launched in August," he says. The autumn-calving index (ACI) falls between the SCI and PLI. "And that's as it should be since it's not selecting for spring calving traits, or the traits that all-year-round calving herds would select for. Instead it's a mixture of the two. Some would say the best of both," he adds.

The emphasis on fertility in the new ACI is the same as the SCI, which isn't surprising as both systems depend on a tight calving block. "But that's where the similarity ends," says Mr Winters. "Autumn-calving herds produce milk from a different feeding system – winter rations rather than grazing. So different production and type attributes are required. Yields must be higher, as must fat and protein content. These producers are producing milk at a time of year when feed costs, by default, will be higher. They need to see a return on that investment."

The other advantage of both SCI and ACI is that they're formulated in the UK for cows managed on UK systems. Prior to the launch of SCI, many spring-block calving herds were looking at the breeding worth (BW) figure in Kiwi sire proofs or EBIs for Irish bulls. "Not only were these figures confusing, but they were not that accurate as they relate to how cattle perform in these countries – not the UK. "We can boast two indexes now that have been developed using UK data for cattle managed in UK management systems. They're much more reliable and relatable for UK breeders."

It's still early days for the ACI, but Mr Winters says that, so far, feedback has been positive. "This index came about because the industry asked for it. And breeders tell us they're pleased that there's a way to quickly pick out sires that will, potentially, best suit their herd and management system.

Selecting for ACI offers autumn-calving herds the best of both worlds – exceptional fertility, with good yields and type but nothing too extreme. It's more targeted and should help autumn calving producers to more easily navigate their way through the myriad of good sires on offer today."

One such producer is Devon-based Andy Broomfield. He says that the ACI is proving to be an important tool in helping him to select sires for his autumn-block calving herd. His 120-cow herd, which he manages in partnership with his parents Roger and Rosemary and with help from wife Anne-Marie, begins calving between June and December and the family is working to tighten that to a 12-week window between September and December.

Fertile cows

"It's a lifestyle decision, predominantly. But it should also help to improve margins. Calving in a definitive block will mean that there are times of the year when we're less busy – vital when you also want to spend time with a young family," he says.

Andy is looking to breed fertile cows, that will get back in calf easily to maintain the tight block, and he's also looking for cows with smaller stature. "But not as small as those that would suit a spring-calving system. I'm looking for a happy medium, really."

And that's what the ACI offers – the chance to head for the middle ground between an all-year-round and a spring calving system without the hassle of wading through several sire catalogues and hundreds of potential sires.

"For us, using the ACI is the ideal 'filter' – with our herd and system in mind, it sorts the wheat from the chaff," he says. "It provides a good starting point for narrowing down what is, today, a huge list of both genomic and proven sires to choose from. It can be overwhelming and there's always the nagging doubt that you've either overlooked a sire or selected one that's not quite right for the herd. So this tool allows me to home in on sires that suit an autumn-calving system. I can then draw up a shortlist of sires, based on my own breeding goals and preferences."

Marco Winters: "The autumn-calving index has been well received by producers"

at from the chaff

Before he does any of that, however, he looks at his herd's genetic report, which is available from AHDB, to identify the herd's strengths and weaknesses. "I then look at the list of top ACI sires and then narrow those down by looking for the traits that I need to best suit the cows in the herd. I'm typically looking for fertility and I'm also looking for positives for butterfat and protein."

The herd is currently averaging 8,500 litres at 4.5% butterfat and 3.5% protein. Milk is sold to Dairy Crest for making cheese, so constituents are important.

Prior to the index's introduction, selecting sires was a drawn out affair – and slightly more hit and miss. "Now, once we have a 'long list' of sires that score well on ACI and the traits that we're looking for, we draw up a top 20 and look at those within our price range."

A narrowed-down list of about six or seven sires is then run through the computer mating program that Andy uses, to best match sires to individual cows in the herd and avoid issues such as inbreeding.

Initial filter

"The index has really made a difference," adds Andy. "We did look at the SCI as a filter, but the sires just didn't have the stature or some of the other traits we were looking for. And looking at PLI certainly wasn't cutting it for us.

"So it was a relief to finally have an index more specific to our system that allows us to make more informed – and easier – breeding decisions.

"I'm looking forward to see how our herd's breeding evolves during the next few years as a result." |