drystock

Looks aren't all

The Beef Data and Genomics Report helps to separate those cows and heifers that might appear superior from those who are genuinely high performers

Aidan Murray
Teagasc Animal and Grassland Research & Innovation Programme

There are currently around 26,500 suckler farmers signed up to the Beef Data and Genomics Programme (BDGP). A good proportion of these received their first payments under the programme in December. The remaining farmers will receive their payments when they return the genotype tags and complete the survey information. So it is important to do this.

Those of you in the programme will have received a BDGP report in the autumn and if you go into ICBF's online HerdPlus system, you can get an updated report with the current stock in your herd. Your Teagasc advisor can help you to access this report.

Understanding what is in this report is important for several reasons:
• It will tell you the current €urostar replacement values of the females in your herd (cows and heifers) and how many of them are four- and five-star.
• It will indicate how many four- and five-star females you need in your herd in 2018 and 2020.
• If you have a stockbull(s), it will also show his terminal and replacement values.

Key dates

It is important that you make yourself aware of this because there is a requirement in the programme to have a minimum number of four- and five-star females and suitable sires AI or stockbulls in the herd as outlined on page 16.

Martin O'Hare farms a 70-cow suckler herd in Co Louth.

Summary

- Make sure you understand what is in your BDGP report.
- See which category best describes your herd.
- Identify the breeding changes you might have to make to comply with the programme.
- Where your report is telling you that you will be short on four- or five-star females and you want to breed your own, you need to start making breeding decisions this spring if the heifers are going to be on the ground and eligible for October 2018.
- Be aware that the €urostar index of your herd will be continually changing as more and more animals are genotyped and as you cull animals.
- The index is only a tool to help you make better breeding decisions. Use it in conjunction with visual assessment and pedigree information on the animals you have in your herd.
- Everyone participating in the BDGP will have to complete a four hour Training Course in 2016. Courses will start this month and people will be contacted directly when courses are coming up in their area. These courses will further explain your reports and how the indices work.

CASE STUDY

Martin O'Hare farms a 70-cow suckler herd at Little Ash near Knockbridge in Co Louth.

"My report told me that I have cows ranging from one to five stars," Martin says. "While you would predict that some cows would have higher stars you get some surprises. The scheme does help you to identify which animals are genuinely better than others."

Since he returned home to farm in 2007, he has been aiming to improve the genetics of the herd, encouraged by his Teagasc advisor Hugh Rooney. "I have been using AI on a percentage of the cows and fortunately about 61 of the cows/heifers are four- or five-star animals," he says. "We will increase that percentage over the coming years."

Martin is a member of the all-Louth beef discussion group facilitated by Hugh Rooney and Conor Dobson. He grows 80 acres of barley, some of which is fed to entire bulls which are finished at approximately 16 months and heifers which go to the factory at 20 to 24 months.

Commercial

"I would describe my animals as commercial sucklers," says Martin. "They have Limousin, Simmental and Hereford blood and the stock bull is a Charolais. So we have a range of crosses. As I said, you can't always tell if an animal has a high star rating just by looking at her. The Beef Genomics Scheme helps us to identify the really good animals."

drystock

Female requirement

• On 31 October 2018, you are required to have a minimum 20% of your reference number of the females in the herd four- or five-star on replacement index (across or within the breed).
• On 31 October 2020, you are required to have a minimum 50% of your reference number of the females in the herd four- or five-star on replacement index (across or within breed).

Heifer requirement

• Homebred heifers must be four- or five-star at the time of genotyping.
• Purchased heifers must be genotyped four- or five-star at the time of purchase.
• Heifers that are purchased and not genotyped will have to be genotyped four- or five-star before they are eligible.
• Heifers must be at least 16 months old on 31 October 2018 or on 31 October 2020 to be eligible. They do not have to be in calf on those dates.

Sire requirements

Stock bull

At least one stock bull on 30 June 2019 should be four- or five-star genotyped on terminal or replacement index (within or across breeds at the time of purchase).

If this bull is replaced after 30 June 2019, then he should be replaced by 30 June 2020, so that you have at least one stock bull that is genotyped four- or five-star on terminal or replacement index (within or across breeds at the time of purchase).

Using AI bulls

From June 2016, at least 80% of AI used must be four- or five-star genotyped on terminal or replacement index (within or across breeds).

Which category does your herd fall into? On the ground, we are broadly seeing that herds are falling into one of three categories when they examine their BDGP report.

Approximately 26,500 farms in Ireland are signed up to the (BDGP).

• **High numbers of four- and five-star animals:** The report is showing a high number of four- and five-star cows in the herd and equally there are high numbers of young heifers coming through as potential replacements. These herds have focused on breeding maternal traits into their herds over the years and provided they maintain a similar breeding strategy, they will more than meet the requirements of the BDGP. Some of these herds will find that there will be a demand for their surplus high-replacement index heifers as other farmers move to upgrade their herds.

• **Average numbers of four- and five-star animals:** In these herds, probably over a quarter of the cows are coming up as four- and five-star on the replacement index but less

than a third of their young heifers will be four- or five-star. So, on the surface, they will be alright in 2018 but with average culling rates, these herds may well fall short of their requirements in 2020 unless they take some corrective action.

In their favour, these herds have a base of good cows that with targeted AI on their high index cows can breed suitable replacements by selecting AI sires with high replacement values. Equally, they may look to buy in a genotyped stock bull that has a high replacement value to breed future replacements.

• **Low numbers of four- and five-star animals:** On examination of their BDGP (see below) report, these herds will have less than 25% of the current cows with four and five stars. There may be little, if any, suitable heifers coming through. The focus of these herds has been mainly terminal because they were finishing their own stock or have been targeting high value weanlings or stores. Often, these herds buy in their replacement cows and are focused on using terminal sires.

These herds probably have more immediate decisions to make. If they decide to continue to use terminal sires, then they will have to source suitable (four and five-star) replacements from other suckler herds or even some dairy crosses. If this is the option they run with, then they should buy a few suitable replacements each year rather than waiting until nearer the deadline.

There is an argument that smaller herds that have been breeding mainly for terminal traits and have a good terminal sire would leave themselves with a less complicated system if they could source high health status heifers from outside. But that is up to each individual herdowner.

Larger herds with more than one stock bull might decide to introduce a stock bull with high replacement values if they want to breed sufficient replacements or, if AI is an option, they may target the higher index cows with high replacement index sires.

Synchronisation programmes for beef cows

In 2014 and 2015, a large Department of Agriculture, Food and the Marine-funded beef cow fertility experiment was carried out on 74 commercial suckler herds to develop a heat synchronisation programme to facilitate fixed-time AI (FTAI). The average

pregnancy rate following examination of three synchronisation/FTAI programmes was 55%. Benefits of synchronisation/FTAI include:
• Meeting the requirements of the Beef Data and Genomics Programme by using high maternal index AI sires to

produce replacements.
• Less bull(s) required on the farm.
• No heat detection.
• Only a single insemination.
• All cows are submitted for breeding.

– Federico Randi, Mervyn Parr and David Kenny, AGRIP, Teagasc, Grange