



# Reaching for the stars

**BDGP Cows** 

Replacement

Index

€85

€64

Five-star cows put more money in farmers' pockets writes **Shane Devaney** 



HERE is currently a lot of talk about the Beef Data Genomics Programme (BDGP) as most

farmers have received their Eurostar reports from the Irish Cattle Breeding Federation (ICBF). Farmers have been contacting me in the last couple of weeks asking for guidance on how to increase the numbers of four and five star females in their herds in 2018 and 2020.

The best way to achieve this target is to pick out the four and five star cows in your herd and mate them with a five star bull for replacement index.

You can either use AI bulls where some have high data reliability (feedback on the performance of their offspring) or else you could use a stock bull where in most cases their data reliability will be less than 30pc.

The higher the data reliability the more confident you can be that the bull's Star rating won't change. A bull can only be called proven for a particular trait once he goes above 90pc reliability. The other option available to farmers is to go to the mart and purchase their replacements. It is planned that

marts will be able to display on their mart boards the star rating for each heifer which should help to cut out guess work. At the moment there is no date given as to when the marts will be able to display this information.

It was hoped that it up and running this but from talking to o source there is no me anything in the pipeli

### **Understanding you** Replacement Index

The burning question is will farmers have more money in their pockets as a result of this? First we need to take a look at why one cow is given a five star rating with a replacement index value of €100 and the other cow is given a one star rating with a replacement index value of zero.

These two figures are calculated by looking at each cow's sires and grandsires and the offspring associated with them.

Both cows will receive a star rating based on the performance indicators of ancestral traits such as milk, fertility, carcase weight, conformation and docility.

Based on this data, the

progeny in relation to the one

| t would be                            | **   | €44 | 16,823 | 3.71        | 1007 days   | 413 days | 59%  | 1.09 | 3.69  | 358 kgs |   |
|---------------------------------------|--|-----|--------|-------------|-------------|----------|------|------|-------|---------|---|
| s autumn,                             | *  | €8  | 19,793 | 3.46        | 1022 days   | 420 days | 52%  | 1.06 | 3.48  | 359 kgs |   |
| one mart<br>nention of<br>line at the | Difference   |     | +0.87  | -51<br>days | -21<br>days | +20%     | +10% | +15% | +4kgs |         |   |
| ur                                    | Above analysis was performed on the 97,723 suckler cows that were born in 2008, in herds that joined the BDGP in 201 |     |        |             |             |          |      |      |       |         |   |
| ex                                    |  |     |        |             |             |          |      |      |       |         | Τ |

**ICBF** 

ICRE

€uro - Stars

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star cow's ancestry are in the bottom 20pc in the country where the progeny of the five star cow's ancestry would have performed in the top 20pc.

In theory, the five star cows should produce calves that will generate €100 more profit than the one star cow's calves.

### **ICBF Data**

The main table is based on ICBF data and makes very interesting reading. It analyses the 97,723 suckler cows born in 2008 in herds which joined the BDGP in 2015.

It compares cows across the board, from those with a five star replacement index down

to the one star cow. The performance measurements include number of calvings, age at first calving, calving interval, percentage alive after seven years. growth of calves, farmer milk score, carcase weight of progeny and age at slaughter of progeny.

Number

of

Calvings

4.03

3.82

3.71

Numbe

of cows

25,311

19,776

16,020

16,823

There is a startling gap in the performance of both groups of cows.

The five star cows calve down

at a younger age, there are more of them currently in the herd, they go back in calf quicker, they produce more calves, they will have more milk, heavier carcase weights at slaughter and are slaughtered at a vounger age.

These are all factors that

will put more euros in farmers' pockets. The statistics make a very strong case that the five star cows will tick all of the boxes and having too many underperforming cows is costing farmers money.

% Alive

after 7

vears

72%

66%

62%

Milk

Growth

of Calves

1.17

1.12

1.09

1.09

Farme

Milk

Score

3.86

3.75

3.69

### **Profit Monitor**

5 Star v 1 Star Cows

Calving

Interval

399 days

405 days

413 days

Fertility

1000 days 409 days

Age at

1st

Calving

971 days

988 days

1007 days

I have spent the last three years at discussion group meet-ings going through ICBF herd reports with my group members and harping on about a calf per cow per year, calving interval and calf mortality. At times it is a hard to sell the concept

But with suckler farmer margins so low, farmers need to start paying attention to these

**ICBF** 

Age at

slaughter

of

progeny

752 days

772 days

784 days

783 days

791 days

-39

days

Carcass

Carcass

Weight

progeny

363 kgs

359 kgs

358 kgs

358 kgs

Looking at the e-Profit Monitor results for 2014 taken across 494 suckling to weanling/store farms, the top third made a net profit of €241/ha and the average net figure across this group was a loss of €72/ha.

If we as an industry want to make our farming systems more profitable we cannot afford to ignore this data. As farmers analyse their financial performance in greater detail, some are beginning to realise there is no point being a busy fool.

Shane Devanev is a Teagasc advisor

| Table 2 Vincent's Herd V Five Star Cows |                                  |                                     |                    |                               |                          |  |  |
|---|----------------------------------|-------------------------------------|--------------------|-------------------------------|--------------------------|--|--|
| Total                                   | <b>Total</b> ICBF<br>Eurostar's  |                                     | Calving<br>interva |                               | Calf weight<br>@9 months |  |  |
| 22 - Vincent's<br>herd                  | ***                              | 3.86                                | 409 da             | ays                           | 338kgs                   |  |  |
| 22 - 5 star ***** cows                  |                                  | 4.33                                | 399 days           |                               | 356kgs                   |  |  |
| Difference                              |                                  | 0.47                                | -10 day            | /S                            | +18kgs                   |  |  |
| Difference in a herd of 25 cows         |                                  | 2.4 extra calves for sale each year |                    | +396kgs for sale<br>each year |                          |  |  |
| 2.4 calves @ 356<br>kg and 396kgs @     | 6kgs sold @ €2.30/<br>@ €2.30 kg | €1965                               |                    | €911                          |                          |  |  |
|   |                                  | Extra Income Generated €2876        |                    |                               |                          |  |  |

| Table 3 Gerry's Herd V Five Star Cows |                                     |  |                            |   |  |  |
|---------------------------------------|-------------------------------------|--|----------------------------|---|--|--|
| Total                                 | ICBF<br>Eurostar's                  | No. of<br>Calving's                    | Carcase<br>weight at       | Age of slaughter of                           |  |  |
| 25 - Gerry's<br>herd                  | ***                                 | 3.92                                   | 359 kgs                    | 775 days                                      |  |  |
| 25-5 star<br>cows                     | ****                                | 4.33                                   | 363 kgs                    | 752 days                                      |  |  |
| Difference                            |                                     | 0.41                                   | 4 kgs                      | - 23 days                                     |  |  |
| Difference in a                       | herd of 25 cows                     | 2.4 extra<br>cattle for<br>sale e/year | +100kgs for<br>sale e/year | 25 cattle gone<br>23 days earlier<br>off farm |  |  |
| 2.4 cattle @ 35<br>@ €4/kg and 10     | 9kg carcase weight<br>10kgs @ €4/kg | €3446                                  | €400                       | €1035   |  |  |
|                                       |                                     | Extra Income Generated £4881           |                            |   |  |  |

# **CASE STUDY**

THE FOLLOWING is a case study based on two typical farmers I deal with week to week. We will compare the performance of their herds against the performance of the five star cows by using the data from ICBF in the main table (above).

Then we will look at the income both farmers can potentially generate if they had a herd of all five star cows

## **Suckling to weanling system**

The first farmer - Vincent - farms 28 hectares. He has a herd of 22 cows and he sells all their offspring as weanlings at the backend of the year. Table 2 (Left) compares Vincent's cows and the five star cows from the ICBF analysis.

The average Eurostar across his herd is three stars. His average number of calving's per cow is 3.86 with a calving interval of 409 days.

The weight of his weanlings at nine months of age (the age at which he sells them) is on average 338kgs.

If Vincent brought all his cows up to five stars he would have an extra 0.47 calvings per cow and his cows would be in calf 10 days sooner. At nine months of age his weanlings will also be 18kgs heavier.

He would have an extra 2.4 calves to

sell each year. At a weight of 356kgs and an average price of €2.30/kg, this would generate an extra €1,965. There would also be an extra weight gain of 396kgs (22 weanlings x 18kgs) to sell @ €2.30/kg which yields him an extra €911.

Bringing his herd up to five stars could generate an extra €2,876 in any one year.

# Suckling to beef system

Our second farmer — Gerry — farms 42 hectares. He has a herd of 25 cows and he brings all of the offspring to beef. Table  $3\,$ (left) compares Gerry's herd performance against the five star cows.

They have an average Eurostar value of three stars with 3.92 calvings per cow. His average carcase weight is 359kgs and the age at slaughter is 775 days.

Bringing the entire herd up to five stars would produce an extra 2.4 cattle for sale each year.

At a carcase weight of 359kgs and price of €4/kg this could potentially net him an extra €3,446. His extra 100kgs of beef at slaughter due to their better performance of 4kgs/head at €4/kg would generate up

By finishing the cattle 23 days earlier off grass Gerry can make a saving of €1.80 to €2/kg per head per day. In a herd of 25 cattle this would be a saving of up to €1,035. In total Gerry's herd could yield an additional  ${\in}4,\!881\,\mathrm{per}$  in any given year.

