Introducing the B.O.W. (Beef’s Own Worth)

Margaret Kelleher
ICBF & Sheep Ireland Genetics Conference 2020
17th January 2020
Introduction

ICBF database registrations 2016 to 2019

Number of animals

<table>
<thead>
<tr>
<th>Year</th>
<th>Beef</th>
<th>Dairy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>940,845</td>
<td>800,000</td>
</tr>
<tr>
<td>2017</td>
<td>929,911</td>
<td>857,638</td>
</tr>
<tr>
<td>2018</td>
<td>886,861</td>
<td>807,638</td>
</tr>
<tr>
<td>2019</td>
<td>859,638</td>
<td>859,638</td>
</tr>
</tbody>
</table>

% difference year on year

- Beef: -3%, -5%, -3%
- Dairy: +2%, +3%, +5%
Introduction

ICBF database registrations 2016 to 2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Beef</th>
<th>Dairy</th>
<th>% difference year on year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2,288,365</td>
<td>800,000</td>
<td>1,488,365</td>
<td>2%</td>
</tr>
<tr>
<td>2017</td>
<td>2,323,669</td>
<td>800,000</td>
<td>1,523,669</td>
<td>0%</td>
</tr>
<tr>
<td>2018</td>
<td>2,322,239</td>
<td>800,000</td>
<td>1,522,239</td>
<td>0%</td>
</tr>
<tr>
<td>2019</td>
<td>2,318,475</td>
<td>800,000</td>
<td>1,518,475</td>
<td>0%</td>
</tr>
</tbody>
</table>
Introduction

Over 80% of all calves sold in 2019 were sold during 4 months in 2019.

Calf mart sales by month and year

- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
- Nov
- Dec

Number of animals

Year of sale

2016  2017  2018  2019
The challenge

- Transition occurring between dairy and beef numbers
- Increase in beef coming from dairy herd
- Almost 1/4 million calves sold at less than 6 weeks old
- >1/4 million weanlings sold before 12 months old

Predicting future carcass value at the time of sale can be difficult

Who is worth more? How do you decide?
Tools to improve profitability

Genetic merit indices for breeding

Decision support tools for management
Genetic merit indices

Purpose: To breed dairy replacements
Using: Dairy sires

Purpose: To breed suckler replacements
Using: Beef sires

Purpose: To breed beef finishers
Using: Beef sires

Purpose: To breed beef finishers
Using: Beef sires

Breeding indices
Management tools

Purpose:
To manage dairy cows on own performance

Purpose:
To manage suckler cows on own performance

Purpose:
To manage beef finishers on own performance

New research released

Integration into ICBF database
What traits are important for animals destined for beef?

B.O.W. = Beef’s Own Worth

Traits

- Carcass weight
- Carcass conformation
- Carcass fat
- Docility
- Feed intake

Fíona Dunne, et al.
(submitted to J. Dairy Sci.)
B.O.W. = Beef’s Own Worth

Age
Parity
Dairy %
B.O.W. Validation (Dunne et al.)

874 bulls and steers
Slaughtered 2016 – 2018

Data available:
Feed Intake records
Carcass information:
• Carcass Weight
• Carcass Conformation
• Carcass Fat
• € Price/kg
DAFM Integrated Dairy Beef 2020

• Pilot during Spring 2019
• Larger pilot to commence this Spring 2020
• Independent pricing structure to incorporate B.O.W. in the calculation of the calf price this year

Collation of data → Dairy herd → Mart transports → Rearer herd
B.O.W. Validation (ICBF)

Data
- Mart sales 2019
- Calves 10 to 42 days old
- Sale dates between February to June
- Number of animals = 1,168
B.O.W. Validation (ICBF)

Data
- Mart sales 2019
- Calves 10 to 42 days old
- Sale dates between February to June
- Number of animals = 1,168

B.O.W. and calf price grouped by month of sale
Dairy-beef timeline of events

Breeding

Calving

DNA calf reg

Sale

Beef’s Own Worth

DBI

Sheep Ireland

www.sheep.ie

ICBF.com

Dairy Beef Index

Breeding high quality beef cattle from the dairy herd

ICBF
Future application

Selling stock for finishing

B.O.W.

Genetics

Animal effects

Breed

Dam effects

Crossbreeding
Conclusions

• B.O.W. (Beef’s Own Worth) values animals destined for slaughter on their own merit and can be used to aid purchasing/selling decisions

• Accounts for the genetic makeup of the animal as well as non-genetic factors such as breed, dam effects, gender, age

• Provides the buyer with more confidence

• Focuses the seller on breeding better carcass traits

• B.O.W. is currently being integrated into the ICBF database and will be trialed within the DAFM Integrated Dairy Beef pilot this spring

• Future prospect – B.O.W. to be available for all animals, of any age, destined for slaughter