

Teagasc/ABP Dairy Calf to Beef Programme

Johnstown Castle, 2015

With the rise in the number of dairy cows in the national herd, there is a corresponding rise in the number of calves from the dairy herd available for beef production.

Having studied the production blueprints for early maturing crossbred heifers and steers, the focus of attention turned to investigating the impact of choosing easy calving, short gestation sires (typical choice by dairy farmers for ease of management) versus average gestation sires on progeny performance.



2015 Programme objectives:

To analyse:

- a) Calf performance between different Angus, Hereford and Limousin sires.
- b) Progeny performance of easy calving short gestation vs average gestation sires.

2015 Programme design:

- Sire groups balanced for calving difficulty and carcass traits.
- Holstein Friesian cows only, parity 2+.
- Angus and Hereford sires;
 - 2.89 days difference in gestation between Angus groups.
 - 3.04 days difference in gestation between Hereford groups.

Animals killed from Johnstown Castle for the 2015 programme at predetermined slaughter ages. These were set according to the most profitable production systems found for early maturing crossbreds from previous dairy beef research.

- Heifers at 19 months.
- Heifers at 21 months.
- Steers at 21 months.
- Steers at 26/27 months.



2015 Programme animals:

- Calves all reared through the ABP Blade Ireland Programme on the same rearing protocol.
- All calves weighed on arrival, weaning and leaving Blade rearing farms.
 - Approximately 650 calves purchased from 80 dairy herds.
 - 250 calves in Johnstown castle, 360 on ABP trial farm (Clonegal, Co. Carlow).
 - 28 sires (Angus/Hereford); 304 Angus calves and 269 Hereford calves.
 - 363 short gestation, 150 average gestation.
 - 76 Limousin calves.

Parameters measured:

What are we measuring on farm?

- Calf vigour (birth herd);
- Calf size (birth herd);
- Calf quality scoring;
- Weight gain from arrival to weaning on rearer farms;
- Weight gain from weaning to turn out to grass;
- All animals weighed every 3 weeks until slaughter;
- Health incidence recorded (lameness, scour, pneumonia etc.);
- Feed intake (50 animals in Tully);
- Back fat and skeletal measurements pre-slaughter .

What are we measuring at slaughter?

- Carcass weight
- Conformation and fat scores
- Kill out percentage
- Kidney and channel fat
- Carcass measurements
- Meat pH and temperature (2, 4, 6 and 48 hours post kill)
- Meat yield
- Meat quality
- Marbling

Results:

Results are still to be fully analysed. Some preliminary results can be found here under the paper entitled "How can genetics play a role in a profitable dairy-beef system?"
<https://www.teagasc.ie/media/website/publications/2017/National-Beef-Conference-Proceedings-2017-Final.pdf>