

IRISH CATTLE BREEDING FEDERATION

Data Recording and New Developments #ISGC18



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Introduction

- HerdPlus Overview
- Data Recording
- HerdPlus & LambPlus Apps
- Data in the database
- New Sensor Technologies
- New Developments



HerdPlus Overview

- HerdPlus: ICBF's subscription service.
- Membership: ~8,800 Dairy & ~16,800 Beef
- Web Site: 753k logins YTD (+12%)
 - Online Applications e.g. Catalogue, ePM, KT, etc.
 - Sire Advice: ~3.5k herds; C.O.W.: ~13,000 runs
- · Aim to increased number of farmers actively engaged.
- Data Ownership Policy: Data is owned and controlled by the farmer for the benefit of farmers & national good.



Data Recording

Data is the lifeblood of ICBF.



- Think of the ICBF database as a huge jigsaw puzzle.
- The more pieces of the "puzzle" we have (data), the more complete the "picture" (genetic indexes) will be.
- Recording sires, calving ease, milk recording, liveweights, inseminations, etc. all feed into genetic evaluations.

Rubbish In = Rubbish Out



Increase in Data Recording (2013 - 2017)

Milk

Milk Recorded 689,721 (up 22%) **Dry offs** 518,469 (up 29%)

Fertility

Al Serves 1,176,106 (up 32%) **Natural Serves** 121,818 (up 12%)

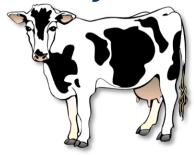
Calving

Sire Recorded 1,610,110 (up 14%) **Calving Ease** 1,818,906 (up 12%)

Beef

Carcass Wgts 1,653,292 (up 18%)

Dairy EBI



Beef Euro-Star



Health

Mastitis records 20,876 (up 56%) Lameness records 5,374 (up 29%)

Management

Docility/Temp 556,459 (up 45%)

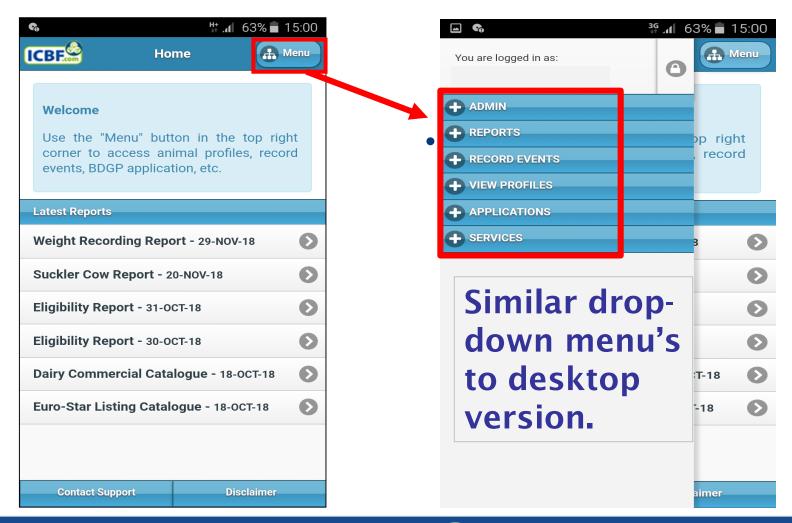
Maintenance

Cow Live Wgts 205,870 (up 24%)



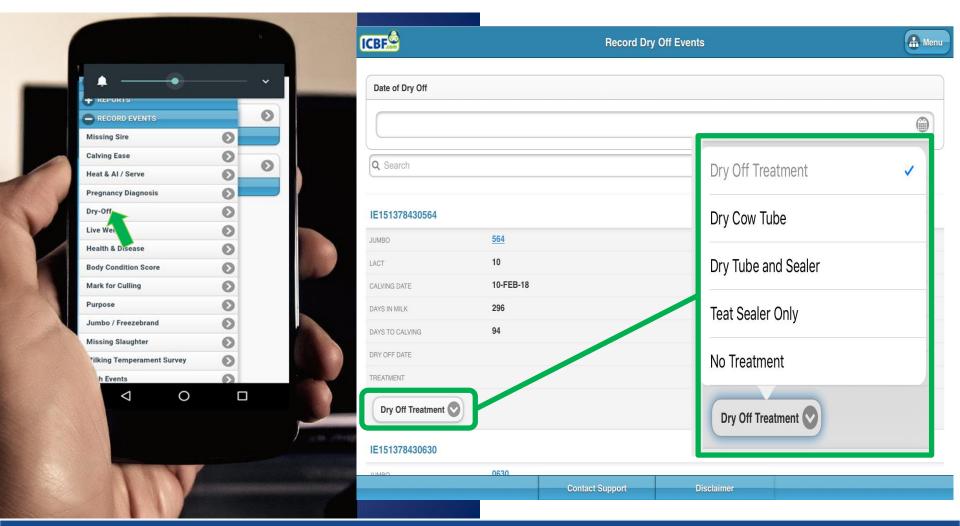


HerdPlus App



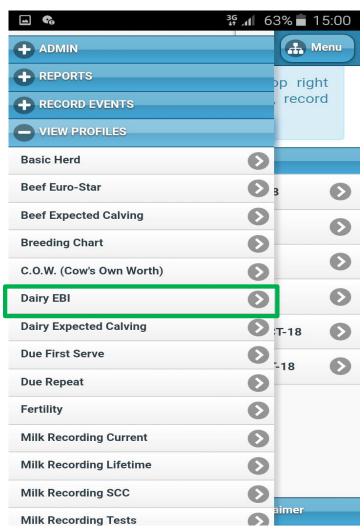


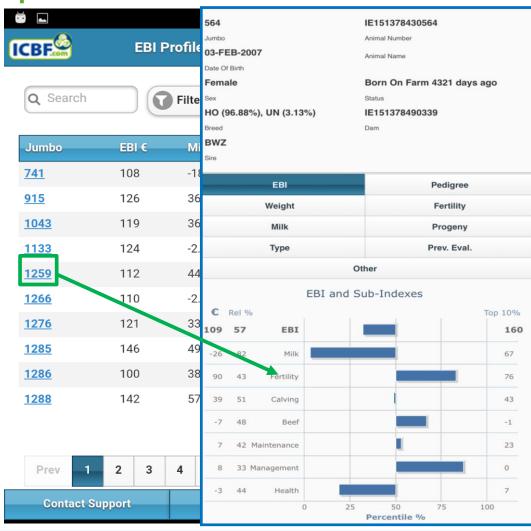
HerdPlus App – Record Events





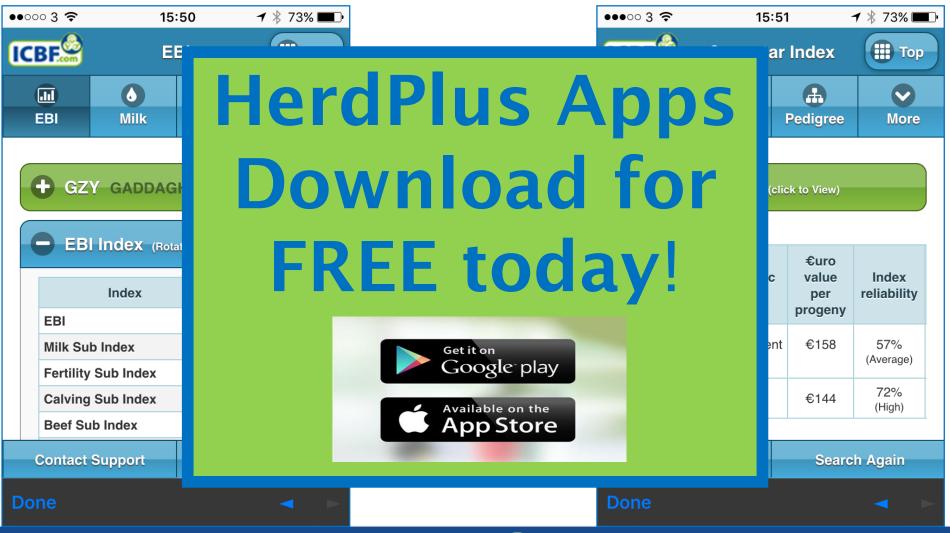
HerdPlus App – Herd Profiles







HerdPlus App – Animal Search





LambPlus App

- Free to LambPlus members
- Works on & offline
- Bluetooth technology connects to an EID reader
- Ability to record:
 - Lambing info
 - Weight info
 - Health info
 - Mating info
- What's next?
 - Pregnancy recording
 - Animal movements





Data in the ICBF Database

• Herds: 106k

Live Animals: 6.2m

Calving Records: 2.3m/yr

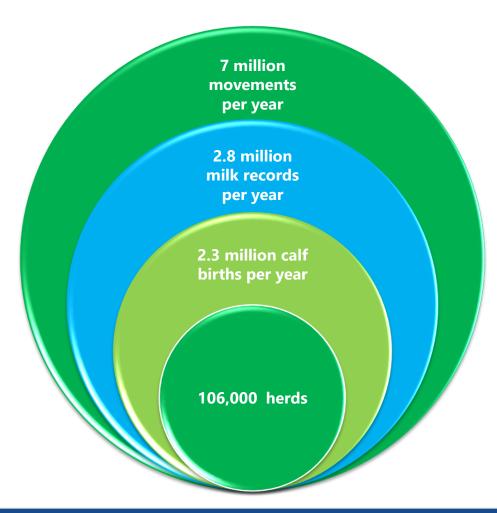
• Milk Recording: 2.8m/yr

Farm Movements: 7m/yr

Slaughter Data: 2m/yr

• BVD records: 2.3m/y







Data in the ICBF Database



Genotypes in 2018 = 353,580

77.7 Billion Genotype SNP - Sep 2018

62.7 Billion Genotype SNP - Mar 2018

18.3 Billion Genotype SNP - Mar 2016

8.6 Billion Genotype SNP - Jan 2015

1.8 Billion Breeding Value Records



New Sensor Technologies

Sensors are helping farmers fill the data gap



Lameness detection



Metabolic disorders





Heat Detection

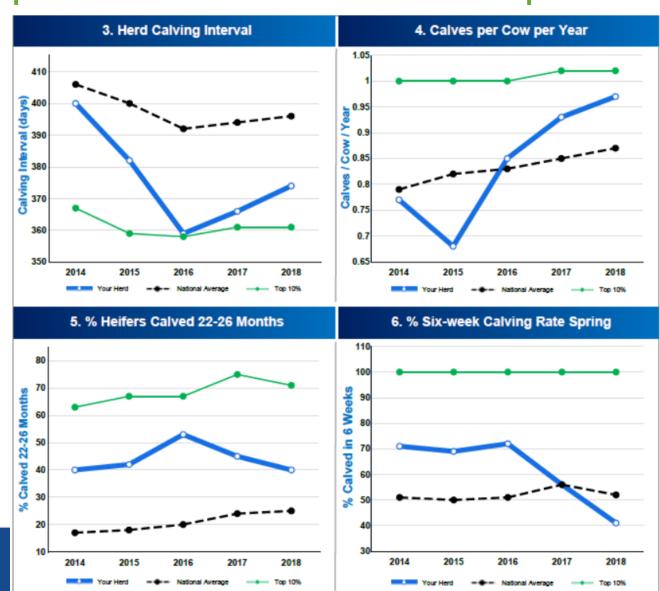


Milk Composition



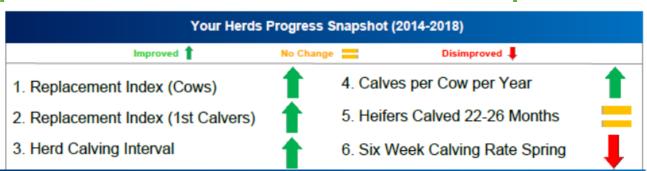
New Development – 5 Year Trend Report

- Snapshot table of progress over 5-years.
- Graph the progress of herds top six genetic and calving KPI's.
- Compare your herd with the National Avg. and Top 10%.



New Development – 5 Year Trend Report

 Snapshot table of progress over 5-years.



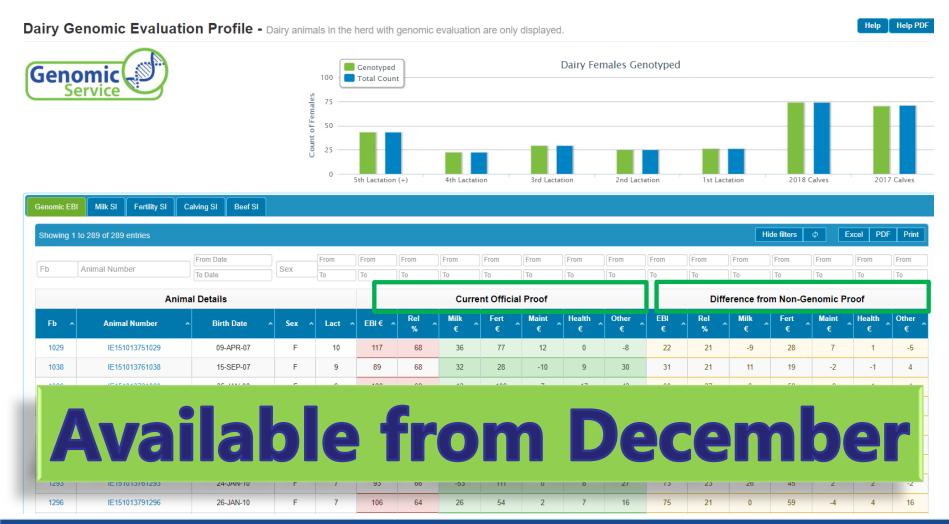
7. 2018 Key Performance Indicators

	Your herd Average	National Average	Top 10%	*Your National rank			
1. Replacement Index (Cows)	€87	€80	€100	65%			
2. Replacement Index (1st Calvers)	€85	€83	€114	50%			
3. Herd Alabara from a labaration of the labara							

4. Calve Available from Jan

5. % Heifers Calved 22-26 months	40%	25%	71%	81%
6. % Six Week Calving Rate Spring	41%	52%	100%	70%

New Development – Dairy Genomic Results





New Apps Under Development



Pilot DNA project



Linear Type Scoring

Available from January

Summary

- Data is the lifeblood of ICBF.
- Integrated cattle breeding databases.



- Aim to increased number of farmers actively engaged.
- New sensor technologies will continuously enter the market and demand will continuously grow.
- Apps important part of development in 2019.
- Big Data isn't just about the technical tools used to collect the data but connecting the tools with people.





Our Farmer & Government Representation







Our Al & Milk Recording Organisations









Our Herdbooks







































MRI Cattle Society of Ireland Norwegian Red Cattle Society



Acknowledging Our Members