Developing a low cost DIY weight recording model for beef cows and calves in Ireland

Niall Naughton, ICBF

ICAR Prague, June 2019



Who are ICBF?

- Based in Cork, Ireland
- Established in 1998 to increase farm profitability through genetics and data integration.
- Vision
 - Empowering sustainable farming through collaboration and excellence in genetics and big data solutions.
- ICBF national central database.
 - All stakeholders sharing data for farmer & industry benefit.
 - 2nd in world to launch dairy genomics.
 - Beef Genomics, largest cattle genomics project globally.



Beef Environmental Efficiency Pilot (BEEP)

 Announced by the Irish Department of Agriculture in October 2018.



- €20 million budget targeting the weighing of 500,000 Beef animals.
- Farmer receives €40 for weighing a cow and her calf.
- Weights must be submitted to the ICBF database before 1st
 November 2019.
- ICBF is responsible for the administration and coordination of the project.



Beef Environmental Efficiency Pilot (BEEP)

Reason:

- Low levels of weighing on beef farms
 - 2% of weanling
 - 1% of cows

Goals:

- 1. Support decision making on farms through better quality data on herd performance.
- 2. To further increase economic and environmental efficiency in the Irish suckler herd.
- 3. Ultimately help reduce carbon emissions.
- Pilot began in February 2019 with 18,700 herds.





BEEP Challenges

- 1. Unknown level of weighing equipment on farms
 - Some farmers will have their own equipment.
 - Some will use technician services or borrow scales.





Decision made to set up a rental solution.



Rental Service

- Nationwide rental service
 - Had to be set up in less than five months.
- Estimated we needed
 - 400 sets of weight equipment.
 - 70+ depots around the country.
- EU tender procurement process
 - 1. Weighing equipment.
 - 2. Service provision.
- The rental fee for the farmer would be €50 per day.





Weighing Equipment









Depots

- ICOS won the tender for the service provision.
- Rental service provided via Co-Ops and marts





















Equipment Management Software

Booking software

- Allow farmers reserve equipment online.
- Design and develop customised booking software.
 - Investigated off the shelf options but they were not suitable.
 - Software was developed in house by ICBF.

Depot Management Software

- Depots book out and book in equipment.
- Record any issues with the equipment.
- Keeps track of inventory, facilitates the movement of equipment between depots.
- Software available at <u>www.mybeep.ie</u>



www.mybeep.ie

C http://www.mybeep.ie





Beef Environmental Efficiency Pilot (BEEP)

The Beef Environmental Efficiency Pilot (BEEP) was launched by Minister Michael Creed TD on Wed 30th Jan 2019. Funding of 20 million euro has been made available by the Department of Agriculture, Food and the Marine (DAFM) for the pilot which aims to capture on-farm liveweights of approx. 500,000 cows and their calves.



How do I register my weighing scales for BEEP?



Rent A Scales

Register Scales / Record Weights

Technician Services

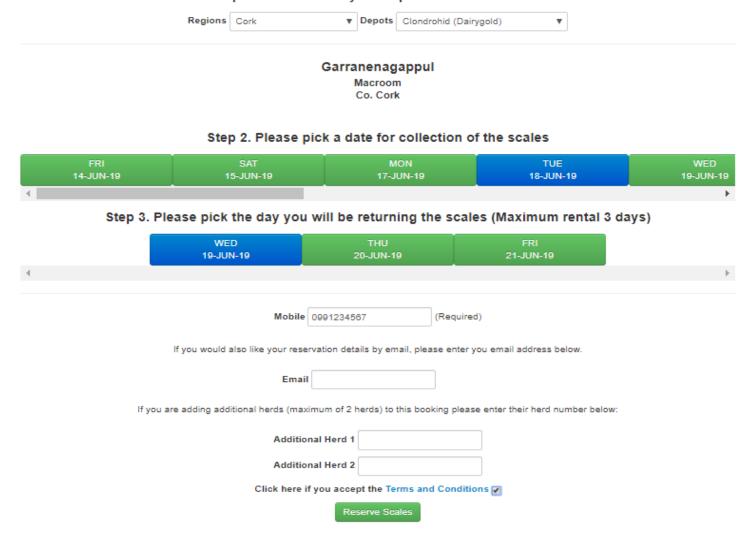
FAQ

Admin Login

Farmer Booking screen

Please note: The rental charge is €50 per day (excluding Sundays)

Step 1. Please select your depot from the list below



Depot Book out/in screens

	BEEP Book Out	
Reservation No.	190614-007	
Herd No.(BTE)	D1770498	
Name	JOE WALSH	
Scale Set Number	Please select a Scale ▼	
If you are adding a booking p		2 herds) to this below:
Additional Herd 1		
Additional Herd 2		
Please Return On:	SAT 15-JUN-19	
	Book Out	

BEEP Book In

Booking No.	190614-007	
Herd No	D1770498	
Name	JOE WALSH	
Scale Set Number	SET_055	
Payment Methods	Cash	*
Scales Clean?	Yes No	
Are the scales in acceptable condition?	Yes No	
	 Damaged Cable Missing Caps on Indicator / Beams Load Feet Bent or Worn Black Image on Indicator Screen (LCD) Indicator Case Cracked Other 	
Comment	Book In	

Farmer weighs the animals





Other factors

Training

- Depots, 10 regional meetings to train staff.
 - Information about the scheme.
 - Booking software.
 - Engagement with depots.
- Videos to train farmers and depot staff.
 - Developed videos in house.

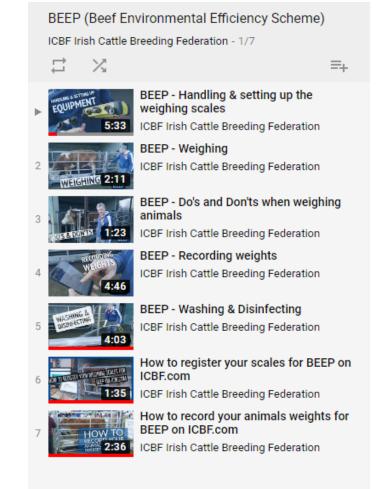
Rental T&Cs

- Significant work in coordinating all parties.
- Farmer signs T&Cs and is given an instruction booklet when collecting equipment.

Call Centre

Trained to answer queries from farmers regarding the scheme.







Weight Recording Options

- Weights need to be submitted to the ICBF database
- ICBF developed an Android/IOS App.
- 2. Web page

www.icbf.com

3. Paper forms.

Sent in by post and keyed.

- 4. Third party software/apps that integrate directly with ICBF.
- Encourage digital transmission.

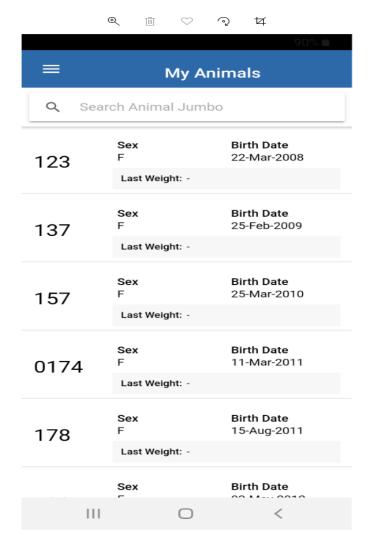


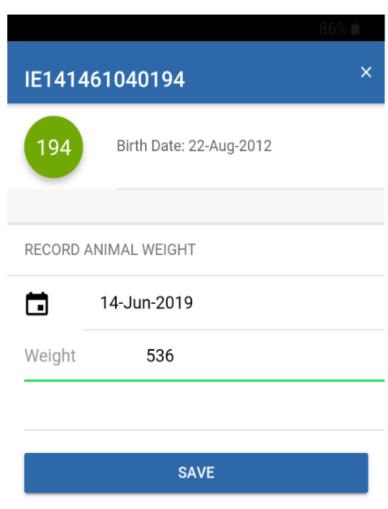




Weight Recording Options – Android/IOS App







Weight Recording Options – Webpage

BEEP- Record Animal Weight Record live weights for cows and their calves.

Listing of animals eligible to be weighed for BEEP which have not yet had a weight submitted, animals with valid BEEP weights and animals who have left the herd without a valid weight. To record weights on other animals in your herd or animals which have BEEP weights already submitted please click here

Date of Weighing:	

Animals To Be Weighed	unimals With Valid BEEP Weig	hts Invalid Departed Animals					
Showing 1 to 39 of 39 entri	es						
Jumbo	^	Animal Number	^	Sex	^	Date of Birth	Weight
123		IE141461070123		F		22-MAR-08	
178		IE141461040178		F		15-AUG-11	
194		IE141461040194		F		22-AUG-12	
199		IE141461090199		F		17-DEC-12	
201		IE141461020201		F		27-DEC-12	
205		IE141461060205		F		31-JAN-13	
206		IE141461070206		F		09-FEB-13	
208BI		IE151094460710		F		14-FEB-13	



Weight Recording Options – Paper Option



BEEP Weight Recording



Herd Id: D1770498 Date:06-Jun-2019



Scales Registration Number:

OWN2995

Cow Live	eweight		Calf Livew	eight	
Cow Tag	Weight (kg)	Calf Tag	Birth Date	Sex	Weight (kg)
372224667810285		372224667830320	26-Jan-2019	М	
IE141461070123		372224667840321	28-Jan-2019	М	
IE141461060205		372224667850322	29-Jan-2019	М	
IE141461070255		372224667860323	31-Jan-2019	М	
IE141461070255	Multiple Births	372224667870324	31-Jan-2019	F	
IE141461040260		372224667880325	06-Feb-2019	F	
IE151094460710		372224667890326	09-Feb-2019	F	
IE141461040194		372224667810327	09-Feb-2019	F	

Farmer Management Screens

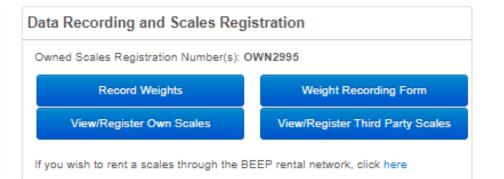
Beef Environmental Efficiency Pilot (BEEP)

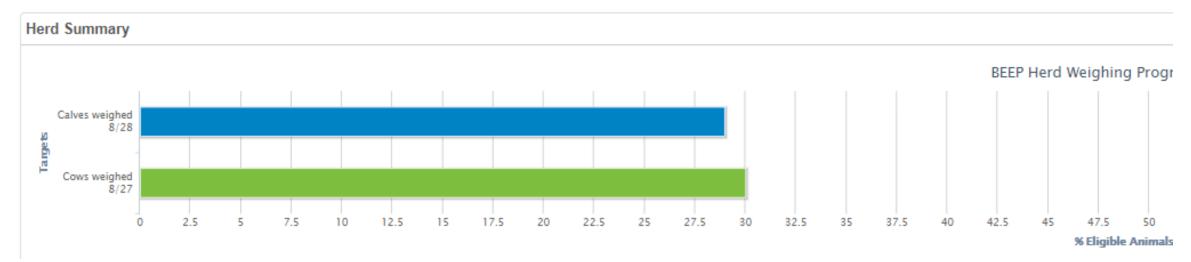
Eligible Animals

Eligible animals to be weighed through BEEP are:

- . Beef calves (beef sire x beef dam) born in your herd from 01-Jul-2018 to 30-Jun-2019
- · The dams of these calves

Eligible calves: 28 Eligible cows: 27







Farmer Report



Weaning Performance Report



Animals born between 01/08/2018 - 29/05/2019

 Print Date:
 29-MAY-2019

 Herd Owner:
 JOHN DALY

 Herd Number:
 D1770498

1. Summary Data - Overview of weight performance of calves born in your herd in the period and their dams.

A. Calf Performance

All Calves

	Born In Period*	No. Weighed**	ADG (kg)	Avg. 200 Day	Weight (kg)	
	Bom in Period	No. Weighed		Your Herd	Target	
All	28	8	1.18	287	N/A	
Males	13	5	1.22	296	300	
Females	15	3	1.11	272	250	

Top Males & Females

Top 5 Males on 200 Day Weight						
Calf Tag	Dam Parity***	200 Day Weight (kg)	ADG (kg)	Dam Jumbo	Dam Rep. Index	
70316	3	326	1.37	217	€111 ★★★★★	
50314	4	317	1.31	210	€65 ★★	
80317	6	308	1.29	174	€48 ★★	

	Top 5 Females on 200 Day Weight						
C	Calf Tag	Dam Parity***	200 Day Weight (kg)	ADG (kg)	Dam Jumbo	Dam Rep. Index	
	90318	7	291	1.2	157	€83 ★★★	
	30312	2	268	1.08	250	€89 ★★★★	

Bottom Males & Females

	Bottom 5 Males on 200 Day Weight						
Calf Tag Dam Parity*** 200 Day Weight (kg) ADG (kg) Dam Jumbo Dam F					Dam Rep. Index		
40313	8	261	1.09	137	€128 ★★★★★		
60315	5	266	1.05	192	€142 ★★★★★		

Bottom 5 Females on 200 Day Weight						
Calf Tag	Calf Tag Dam Parity*** 200 Day Weight (kg) ADG (kg) Dam Jumbo Dam Rep. Index					
10319	2	258	1.06	256	€75 ★★★	

BEEP Rental Solution







Collects weighing equipment, Signs T&Cs



Weighs the animals







Submits weights



Farmer





Returns weighing equipment to depot, pays rental fee.









Operational Considerations

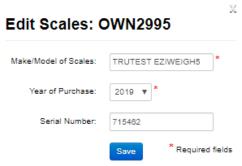
Biosecurity

- Concerns around the spread of disease
- Stress the importance of cleaning and disinfecting equipment
- Part of rental T&C's
 - Equipment must be returned clean by farmer.
 - Payment may be stopped if farmer does not comply.
- The depot disinfects equipment before each rental.

Accuracy of weighing data being submitted

- All farmer owned/borrowed scales need to be registered with ICBF.
 - Provides good knowledge of on farm weighing equipment.
- Quality Control checks on data to identify irregularities..
- Dept of Agriculture audits to ensure compliance.







Outcomes & Learnings

Outcomes

- Developed a national infrastructure for weighing cattle that can be used in the future.
- Help farmers see the benefits of weighing their animals.
- Improved genetic evaluations because of increased data.

Learnings

- Legal issues
 - Tenders and T&Cs were the most time-consuming aspects.
- Early engagement with service providers was essential.





Our Farmer & Government Representation







Our AI & Milk Recording Organisations









Our Herdbooks























Norwegian Red Cattle Society



MRI Cattle Society of Ireland

Meuse Rhine Issel -- Milk & Muscle!

















Acknowledging Our Members