

# Innovation in practice Beef Conference 2014

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# Key driving points

- Gross margin per hectare
- Kgs of live weight per hectare
- Carcase gain
- Quality of forage and winter rations
- Health and welfare of stock
- Soil fertility
- Grass production
- **Key = New research**
  - AFBI co-researcher
  - Agri Search committee

# The end product, Markets, spec, contracts and producer groups





# Keeping ahead of the rest







# Getting stuck into the work

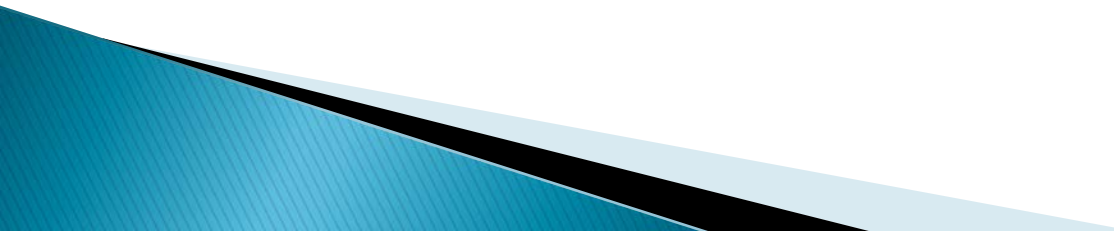




# Researching the alternatives with AFBI



# Methods used to reduce production costs

- Improved forage quality
    - Rotational grazing
    - High quality grass silage
  - High herd fertility
  - Breeding improvements
  - Researching new ideas
- 



# Improving Forage Quality

- Paddock grazing has reduced fertilizer cost by 50%
- Obtaining 1250 kg LW per hectare
- Better grass/silage reduced meal costs by 40%
  - 1244 kg conc/cow reduced to 758 kg /cow



**Profit in our  
hands**



# Grassland management

## Practice

- 3 days paddocks
- Fertiliser with 12 units nitrogen 2<sup>nd</sup> / 3<sup>rd</sup> grazing
- Measure grass weekly
- Take excess paddocks out for silage
- Aim for 16 t DM/ha

## Requirements

- Fencing
- Re-seeding
- (Lime)  
Clover requires soil pH over 6

## Resulted in:

- Better management of stock
- Cows on rising plane of nutrition = Better cow fertility
- Higher live weight gains



# High herd fertility

- Replacements calf at 24 months
- Tight calving spread
- Average calving interval 353 days cows
- Rear 1 calf per cow per year



# Benefits of reduced calving interval from 415 days (NI average) to 380 day

Assume a 50 cow herd

## Labour efficiency

- Not calving all year
- One group of calves - similar size
- Bull with one group
- Easy to keep track of cows fertility

## Selling weanlings

- Calves on average 35 days older at sale

$35 \times 1\text{kg} \times £2.00/\text{kg} \times 44 \text{ calves}$

£3,080

## Feeding

- Save 35 extra days x 50 feeding an empty cow

$1,750 \text{ days} \times 80\text{p}/\text{day}$

£1,400



£110/cow

## Output

- 415 days = 44 calves / year
- 380 days = 48 calves / year

4 calves a year

£1,000



# Breeding improvements

- Using genetics – high EBV's were possible
- Use of synchronisation and Ai



# Synchronisation and AI Research

## ➤ Objective

- Improve genetic potential of the herd
- Use a protocol with minimal labour input

## ➤ Involved with AFB1 pilot study using heifers – 2012

## ➤ Continued to use synchronisation ever since

## ➤ Conception

- 2012            68%
- 2013            80%
- 2014            50%

## ➤ Involved with DAFM project using cows – 2014

- Conception            68%

## ➤ Future RCF research project – sexed semen

# Keeping a high herd health status

- Take blood samples regularly

## Health plan

- Calves
  - Probiotic supplement at birth
  - Clostridial vaccine at debudding
  - Pour-on wormer early and mid season
  - IBR and pneumonia vaccine September & booster 4 weeks later

**Be penny wise – prevention better than cure!!!**





# Current farm performance

- Stocking rate – 3.03 Ce/ha
- Produce 1250 kg live weight per ha (includes sheep)
- Cow weaning efficiency – 2013 48%
- Aim cow condition score >3 at weaning
- Daily live weight gain

Bulls	Steers	Heifers
1.35	0.95	0.9

- 2014 average bulls carcase weight = 398kg  
(carcass gain = 0.84 kg/day)

# Future developments

- Improve forage production & utilisation
  - Sub soiling
  - Protein crops (lucerne and red clover)
  - Minimise energy losses at silo
  - Feed consistency
- Improve slurry utilisation
- Improve livestock housing
  - Ventilation
  - Lux measurement
- Improve animal health
- Genetic improvements
  - Genomics
  - Improved feed efficiency
- Learn more from others
  - Bench marking farm business
  - Attending more monitor farms and research updates
    - Including other livestock – dairy/sheep
- Carbon footprint

# And the winning ? Why do it

