Animal Disease Surveillance at AFBI Beef Conference

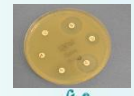
21 November 2018

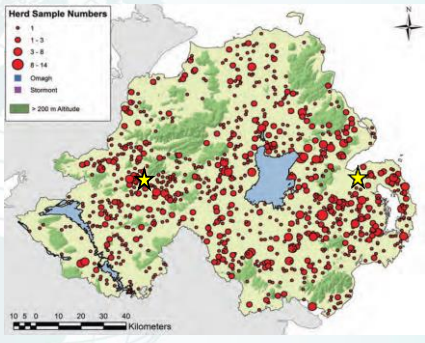
Seán Fee

www.afbini.gov.uk

Animal Disease Surveillance

- Surveillance is collecting information on diseases and infections in order to provide an early warning of and promptly detect animal health and welfare problems.
- Part funded by DAERA
- Underpins our ability to export our produce

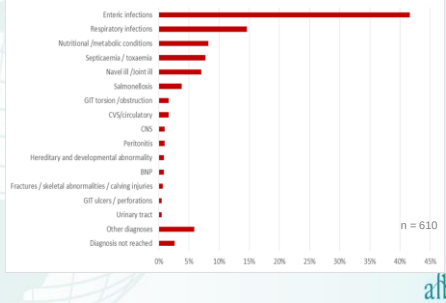


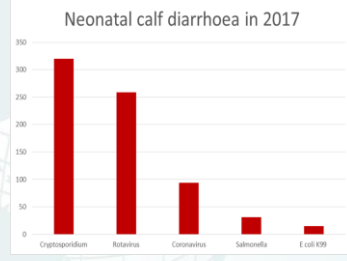


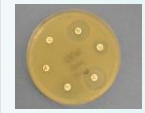
Benefits to the farmer

- Obtain disease diagnosis
  - By submitting clinical samples
  - Carcases for post-mortem examination
- Act on the results
  - Treatment choices
  - Vaccination
  - Colostrum feeding
  - Nutrition
  - Hygiene

Causes of deaths in calves less than 1 month old

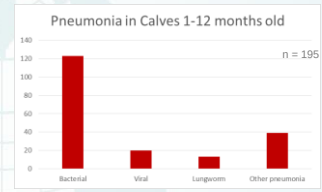


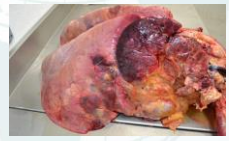


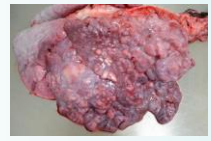


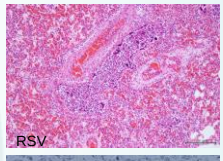
Results from submitted faecal samples and PME in calves less than 1 month old

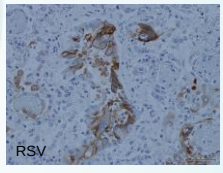
2017 postmortem diagnoses in calves from 1 month to 5 months of age



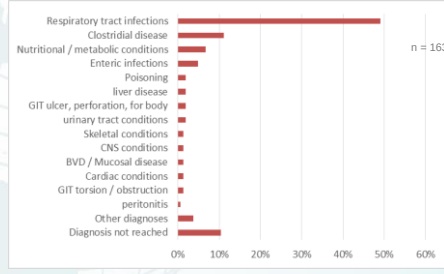


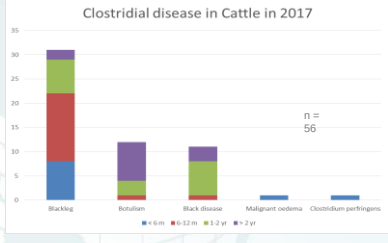


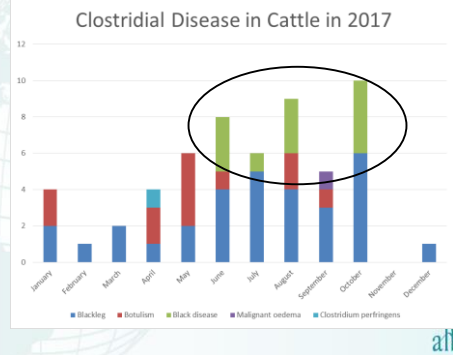


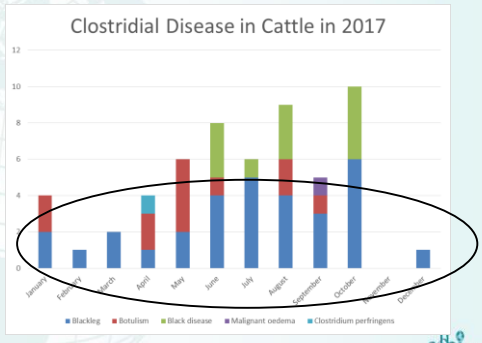


Deaths in calves 6-12 months

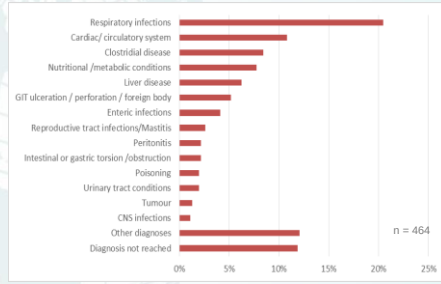


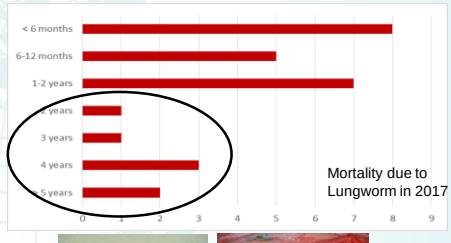


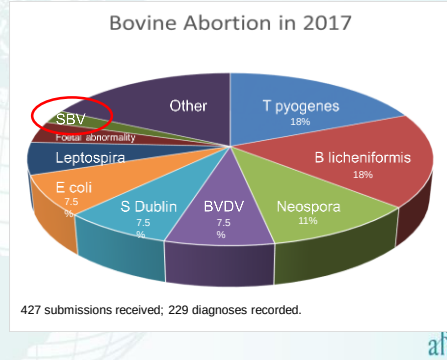




Deaths in cattle older than 1 year in 2017

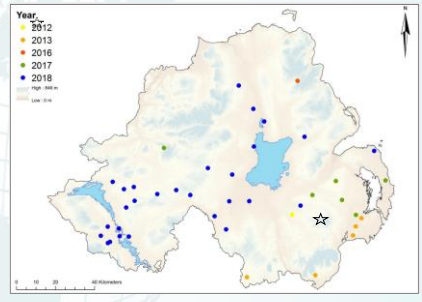






Schmallenberg virus

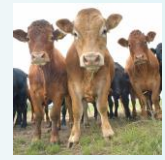
SBV case distribution in NI 2012-2018



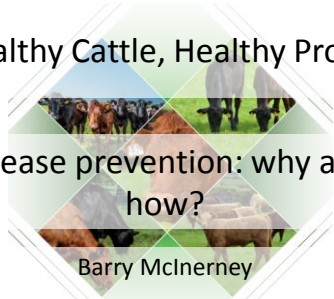
www.afbini.gov.uk/publications/all-island-animal-disease-surveillance-report

Summary

- Investigate cause of disease
  - By submitting clinical samples
  - Carcases for post-mortem examination
- Incorporate results into farm management
  - Colostrum feeding
  - Nutrition
  - Vaccination
  - Hygiene on farm
  - Housing
  - Treatment choices



Healthy Cattle, Healthy Profits



Disease prevention: why and how?

Barry McInerney

A conference jointly organised by

NBA cafre College of Agriculture, Food & Rural Enterprise afbi Agri-Food and Biosciences Institute Ulster Farmers' Union LMC Livestock & Meat Commission

Agri-Food and Biosciences Institute

Disease Prevention – Why and How?

Beef Conference 2018

21st November 2018

Dr Barry McInerney

www.afbini.gov.uk

Economic cost – calf mortality

In the UK lose approx. 6% of calves die each year, at a cost to the industry estimated to be £55 million per annum (DEFRA 2003).

In NI approx. 3.4% of calves died up to 1 month of age

In NI approx. 6.5% of calves died up to 5 months of age

Incidence of calf mortality has not improved in the last 30 years in the UK (Andrews 1999)

Country	*€(million)*	*Ref*
UK	69	DEFRA (2003)[a]
Denmark	40	Osteras *et al.*, 2007[b]
Finland	14	
Norway	8	
Sweden	7	
US respiratory problems	121	NASS Cattle
US digestive problems	81	

[a] beef and dairy calves - cost of calf loss from birth to 6 months of age
[b] dairy calves - cost of calf loss from birth to 6 months of age

Disease Prevention – Why and How?

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[a] beef and dairy calves - cost of calf loss from birth to 6 months of age
[b] dairy calves - cost of calf loss from birth to 6 months of age

Morbidity

Country	*Percentage calves suffering disease or receiving treatment*	
	Average	*Range across farms*
US	39	-
US	15-45	-
Sweden	22	0-58
US	20	0-100
UK	48 (diarrhoea) 46 (BRD)	20-78

USDA 2007, Kelly and Janzen (1986), Lundborg *et al.*, 2005, Fennewald *et al.*, 2001, Johnston et al 2017.

Long term effects - Persistent pneumonia

Parameter	*Effect of pneumonia*	
	Never	*Multiple*
Live weight (kg)		
6 months	165	148
1.5 year	441	428
1st lactation yield (kg)		
Milk (kg)	7204	6867
Fat (kg)	284	272
Protein (kg)	241	227
2nd lactation yield (kg)		
Milk (kg)	8933	8084
Fat (kg)	354	318
Protein (kg)	305	270

- 1st lactation milk yield reduced by approx. 5%
- 2nd lactation milk yield reduced by approx. 10%

How do we tackle calf ill health?

Adapted from John Mee,2013

1. Awareness and re-prioritisation
2. Good Animal Welfare Pays
3. Acting Nationally
4. Research
5. Farm Level Improvement

Herd health plans

- The overall aim - to reduce disease presence on a farm to the very minimum
- Planned management practices to ensure health and therefore longevity, productivity and profitability of animals from birth
  - Disease/health risks are highlighted and discussed
  - Plan put in place to prevent and treat as the need arises
- Include preventative treatments/strategies such as:
  - Strategic parasitic treatments
  - Strategic vaccination plans
- Help farmers demonstrate husbandry and welfare standards for farm assurance schemes and to meet supply chain demands
- Continuous and ongoing review

Herd health plans, disease prevention and AMR

- An effective herd health plan will reduce the use of antibiotics in the face of developing AMR
  - UK-VARSS 2017 (published 24/10/2018)
  - Consumption in food producing animals - 37 mg/kg
  - 40% decrease since 2013

Colostrum management – key foundation for healthy calves

- Calves are born with no acquired immunity and must obtain passive immunity through the consumption of colostrum (Baumrucker *et al.*, 2010)
- Important source of nutrients for thermoregulation and growth (fat, protein, sugars, vitamins, minerals, antibodies)
- Contains range of growth factors and hormones which may have a role in immune system and gastrointestinal tract development
  - Prolactin (18:1 cow)
  - Insulin (65:1 cow)
  - IGF-1 (155:1 cow)
  - IGF-2 (7:1 cow)
  - Lactoferrin (7:1 cow)

(Odle *et al.*, 1996; Blum and Hammon, 2000; Wolinski *et al.*, 2005; Bartol *et al.*, 2008)

Failure of Passive Transfer in Beef Herds

- Recent observational study in Ireland (Jan to May) found:
  - Suckler beef calves had significantly lower passive immunity compared to dairy calves
  - In first 6 months of life suckler beef calves had greater odds of:
    - BRD
    - Navel infection
    - Joint ill/lameness
  - Calves with lower passive immunity were at greater risk of a negative health event or poor growth

Todd et al 2018; Guy et al 1994, Dunn et al 2018

- Adequate passive transfer of Ig dependent on:
  - **Colostrum Quality (Quality)**
  - **Quantity of colostrum consumed (Quantity)**
  - **Timeliness of feeding (Quickness)**

What influences quality?

Dairy farms in NI - 67% colostrum samples exhibited low level of immunoglobulin IgG (<50g/L) (AFBI)

- **Adequate passive transfer of Ig dependent on:**
  - Colostrum Quality (Quality)
  - **Quantity of colostrum consumed (Quantity)**
  - Timeliness of feeding (Quickness)

Colostrum quantity

- Based on typical birth weights - calves require IgG intake 120-180g

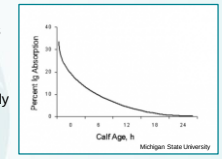
	Colostrum IgG concentration	
	Poor	Average
Required IgG intake (g)	120	120
Colostrum IgG concentration (mg/ml)	20	50
Colostrum intake requirement (L)	6.00	2.40

- Based on range of colostrum qualities offering 4 L of colostrum as soon after birth as possible would result in adequate passive immune status in **86%** of calves
- Study conducted by AFBI showed no negative impact of feeding 4L

- **Adequate passive transfer of Ig dependent on:**
  - Colostrum Quality (Quality)
  - Quantity of colostrum consumed (Quantity)
  - **Timeliness of feeding (Quickness)**

Timing critical

- Ability to absorb immunoglobulin declines with time
- Critical to get sufficient level of colostrum in early to provide passive immunity
- Longer term feeding of colostrum provides localised protection in the gut



Hours post-natal	Mortality (%)
2–6	5
7–12	8
13–24	11
25–48	20

Michigan State University

In summary

1. Awareness and re-prioritisation
2. Good Animal Welfare Pays
3. Acting Nationally
4. Research
5. Farm Level Improvement

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Design for health:

Ventilation without draughts

CAFRE, Greenmount Campus
Wednesday 21 Nov 2018

Healthy stock; Healthy profits

Livestock ~ design needs

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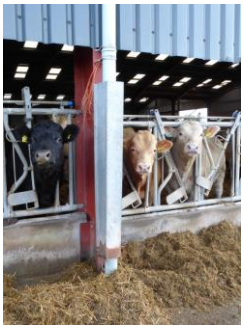
- Hygiene
- Moisture
- Fresh air
- Air speed
- LCTemperature



EASI CLEAN

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MAKE IT EASY TO CLEAN – AND ADD COLOUR…

DRAINS
DRAINZ
DRANES

Make them work

MAKE FLOORS WORK ; NOT HARD WORK

Render the walls; add competent drains; slope the floor

MANURE MANAGEMENT critical for moisture …
BONUS……
HAS MASSIVE IMPACT ON AMMONIA EMISSIONS

Fresh Air – a design requirement

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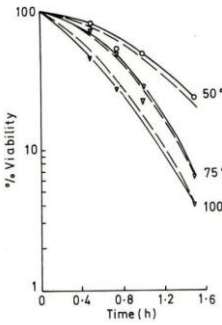

OPEN AIR FACTOR (OAF)

Viability decay curves for E.Coli induced by Open Air Factor.
From Cox C 1987

WIND VENTILATES OUR BUILDINGS >85% time……

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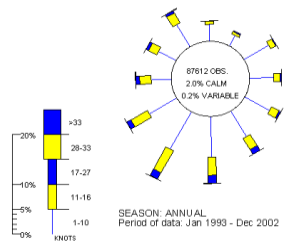
WIND ROSE FOR ALDERGROVE
N.G.R: 3147E 3798N ALTITUDE: 68 metres a.m.s.l.



high frequency of north, north-east and easterly winds in Spring.

https://www.metoffice.gov.uk/climate/uk/regional-climates/ni#wind

CLADDING DESIGN ~ massively important

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RUBBISH SOLUTIONS
GUESSWORK….

FACT
INLET AREAS NEED TO BE MIN. TWICE THE OUTLET AREAS

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Protected inlets.....

manage wind speed

YORKSHIRE BOARDING – Come back soon.....

GET IT RIGHT! Space board is what most people call Yorkshire board. YB is two parallel lines of boards with the holes covered..... Keeps out rain and always drops air speed

YORKSHIRE BOARD ~ BRING IT BACK!

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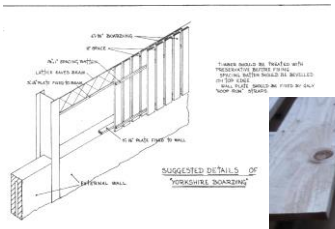
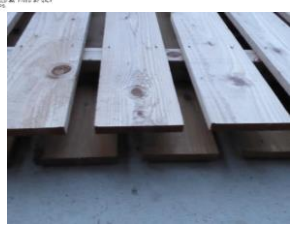


+ £50 PER BAY over spaceboard
(6m x 2m cladding)

Top protection on exposed sides



Yorkshire Boarding

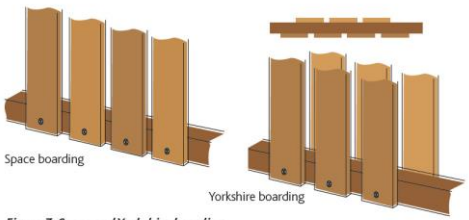


Figure 7: Space and Yorkshire boarding

Investment appraisal

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- VVS 36m long automated system, approx. £18,000 installed both sidewalls
- 3 row system, n = 160 cows, 2 row system, n = 116 cows.
- 3% increase in yield, 50% days per annum
- Return on investment, 3 row system = 24,000l p.a., 2 row system 17,400l p.a.
- **Payback 3 row system = 3 years; 2 row system = 4 years 2m**

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Average wind speeds~ Edgbaston hourly data
Met Office 35 years

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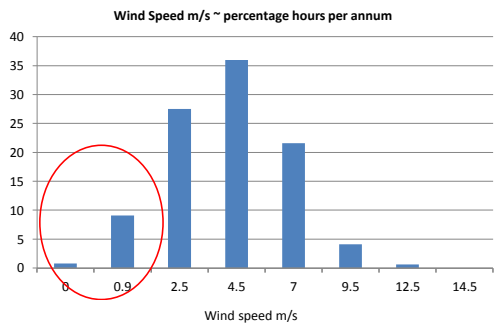
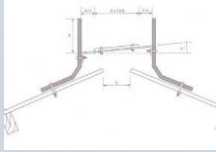


Ventilation requirements

Outlet detail ~ upstands ~ area = 0.04m²/calf
= 0.1m²/adult



GOOD DESIGN

POOR DESIGN
*Outlet area 0.067*m²

BE OBJECTIVE – MEASURE/MEASURE/MEASURE

HARD TO FIX

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Maximise ventilation efficiency

How??

CALCULATE THE OUTLET AREA

Rule of thumb 0.1m²/adult

Accurate calculation:
https://dairy.ahdb.org.uk/technical-information/buildings/ventilation/#.W_LpneKYTcs

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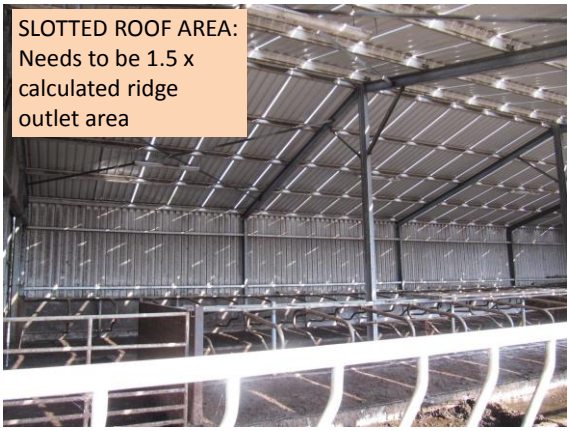
L = 60m
Investment: Ridge @ £100/m = £6000

110 heavy steers; increased 10kg LW each
Increased revenue:
110 x 10 x £2 per kg = £2200
…… In 5 months

Payback on investment < 18 months



SLOTTED ROOF AREA:
Needs to be 1.5 x calculated ridge outlet area

£3,000 – fan, duct and covered open ridge

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Mechanical ventilation

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- If inlets are difficult (ie silage pit wall alongside) there will be benefit from adding mechanical fans to increase airspeed across the cows to facilitate the removal of heat and moisture.
- Note the throw distance of common fans is 18m, and running costs around £2.75 each day
- 46m long, 38.4m wide three-row cubicle house would need 12 fans to cover all cows
- Pay attention to dry cow yards; accumulating moisture plus straw = mastitis risk

Component		Cost	Total cost	Variable cost/day	Variable cost/180 days	
Covered open ridge	1	£110/m	£5060	Nil	Nil	
Open ridge	1	£60/m	£2760	Nil	Nil	
1200mm fans	12	£500 each	£3000	£33 d.	£5940	

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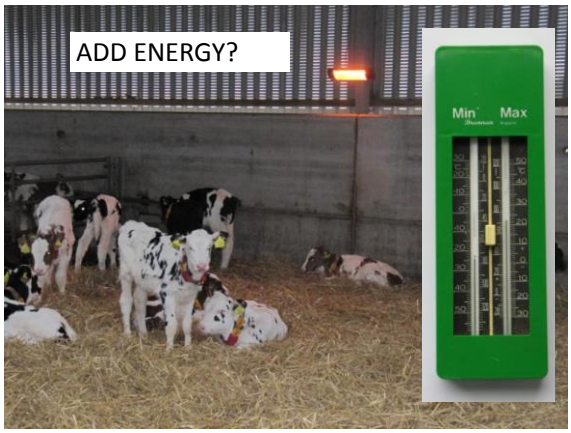
BUILD A FRIDGE……



Design for purpose ~ monopitch

Advertised in farming media as top calf house……

Doors as ventilation providers = calf bullshit

Concrete, steel and tin. Well known for poor thermal properties

Calf Pod ~ 10 calves to 150kg

Design for Health

Attention to:

Hygiene
Control of moisture
Fresh air
Air speed
Thermal dynamics

THANK YOU

animal health - better by design

Livestock Management Systems Ltd
Pioneer House | 79 Waterloo Quay | Aberdeen | AB11 5DE
t 01224 595253 m 07971 564148 e j.robertson@abdn.ac.uk
VAT Registered | 890756973

HEALTHY CATTLE
HEALTHY PROFITS

A Farmer's Perspective on Suckler Cow Performance and Carcase Classification

John Yeomans

21st November 2018

1984
23 cows, 12 barren
200 ewes, lambing ~90%

285 acres –19 rented + 266 (owned by HSBC!)
3 main sites 7 blocks over 5 miles

Closed flock
520 performance recorded Beulah ewes
167 ewe lamb replacements
Plus 50 ewe lambs sold as yearlings

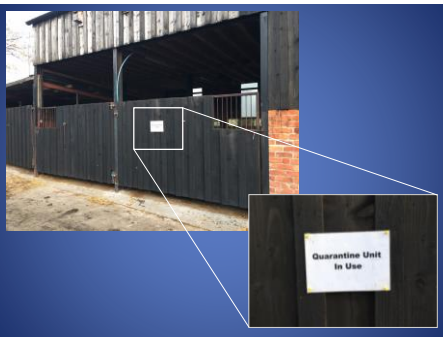
Selling finished lambs
Welsh Mule ewe lambs
Beulah ewe lambs
Yearling ewes
Draft ewes
Breeding rams
Boxed lamb to consumers

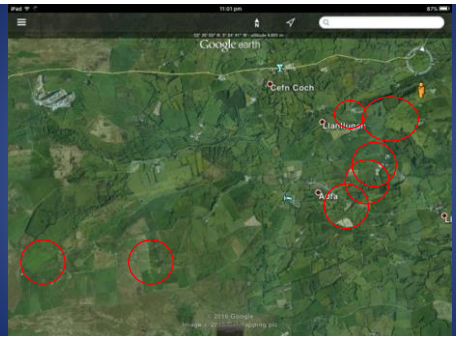
Closed herd
70-75 performance recorded suckler cows
15 replacement heifers calving at 2 years
Pedigree and cross bred imousin and British Blue cross
Selling store cattle and breeding bulls
Boxed beef direct to consumers

- Prevention is better than cure
- Fire Prevention Officer not Firefighter!

Testing and treatment

- Trace Elements
- Leptospirosis
- BVD
- Rotavirus
- Pneumonia
- IBR
- Johnes
- Etc.



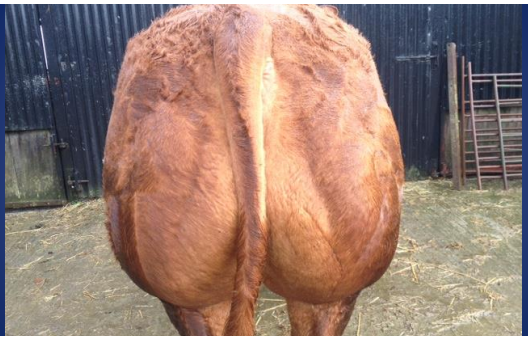

Google earth
Cefn Coch

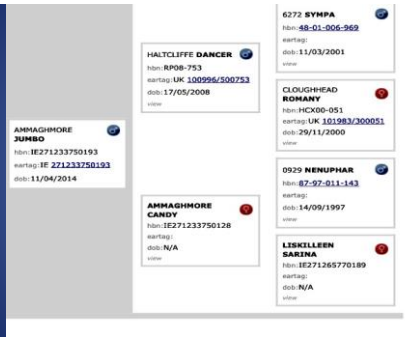
	2013	2017	2018
Calf weaning weight (kg)	285.5	240	258

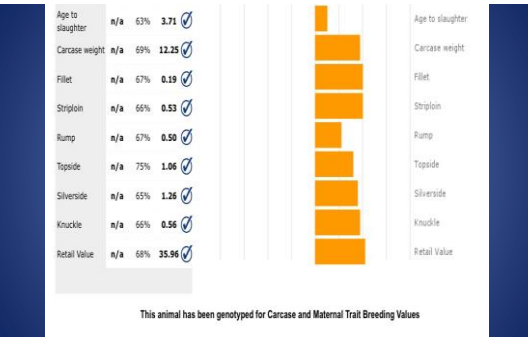
	2013	2017
Animal health costs per cow	£60.93	£51.69

	2013	2016	2018
Calving index (days)	364.5		388.8
Welsh calving index (days)		426	

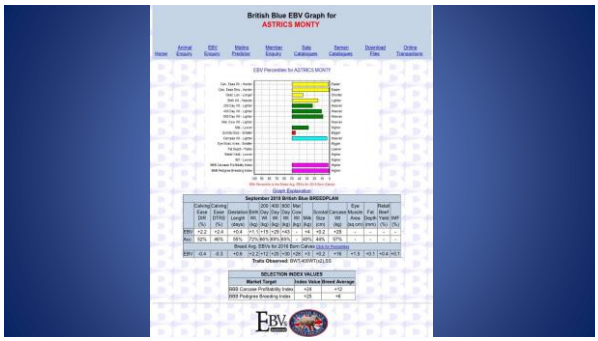
Average age at first calving for Welsh suckler herds in 2017 >2.5 years




AMMAGHMORE JUMBO
hbn:IE271233750193
eartag:IE 271233750193
dob:11/04/2014
HALTCLIFFE DANCER
hbn:RP08-753
eartag:UK 100996/500753
dob:17/05/2008
AMMAGHMORE CANDY
hbn:IE271233750128
eartag:
dob:N/A
6272 SYMPA
hbn:48-01-006-969
eartag:
dob:11/03/2001
CLOUGHHEAD ROMANY
hbn:HCX00-051
eartag:UK 101983/300051
dob:29/11/2000
0929 NENUPHAR
hbn:87-97-011-143
eartag:
dob:14/09/1997
LISKILLEEN SARINA
hbn:IE271265770189
eartag:
dob:N/A


Age to slaughter n/a 63% 3.71
Carcase weight n/a 69% 12.25
Fillet n/a 67% 0.19
Striploin n/a 66% 0.53
Rump n/a 67% 0.50
Topside n/a 75% 1.06
Silverside n/a 65% 1.26
Knuckle n/a 66% 0.56
Retail Value n/a 68% 35.96
This animal has been genotyped for Carcase and Maternal Trait Breeding Values

British Blue Animal Details
ASTRICS MONTY


British Blue EBV Graph for
ASTRICS MONTY

ttle Passport
sport Gwartheg
British Cattle
Ear tag / Tag clust:
UK700764200899
LIMOUSIN
MALE
05 04 2014
am /Mam Enetig: UK700764400383
UK700764400733
Bravoxin 10 given twice as a calf.
Nov 2014 - Rispoval Intranasal,
Pour-on wormer, Flukicide,
Bravoxin 10 booster.
Herd vaccinated against BVD
Leptospirosis and Rotavirus.
Issue Date
Dyddiad cyhoeddi:
14 04 2014
ent history / Hanes Symud
Address
Cyfeiriad

401

Gross Margins – Cattle 2017

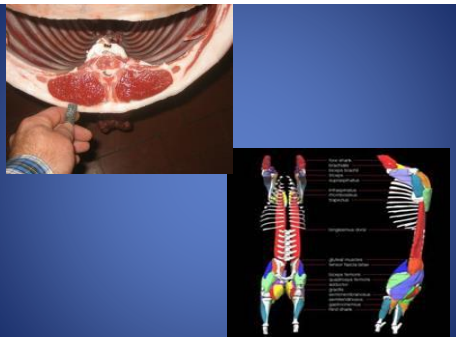
Variable costs		Enterprise output	
Cattle feed	19,391.57	Meat & stock sales	63,605.68
Straw	10,052.00	Subsidies	13852.90
Forage	10,100.85	Closing valuation	99,256.00
Vet and Med	3815.32	**Total**	**176,714.58**
Minerals	886.34		
Misc.	3091.91	Less stock purchases	0
Private meat sales	640.00	Opening valuation	91,024.00
Total	**47,977.99**	**Total**	**85,690.58**

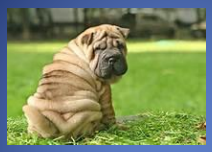
Enterprise output £85,690.58 less variable costs £47,977.99

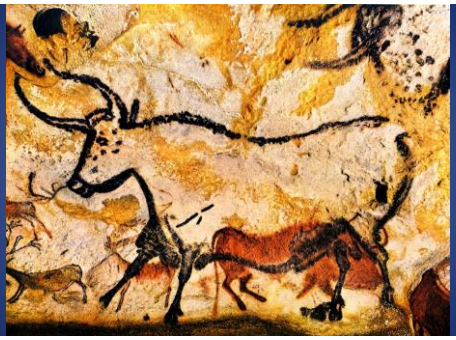
Gross margin £37,712.59

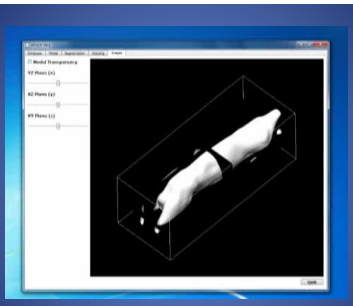
Av. No. Cows = 73.8 Occupying 42.86 Ha 1.72 cows/Ha

Gross margin = £511.01/cow £879.97/Ha





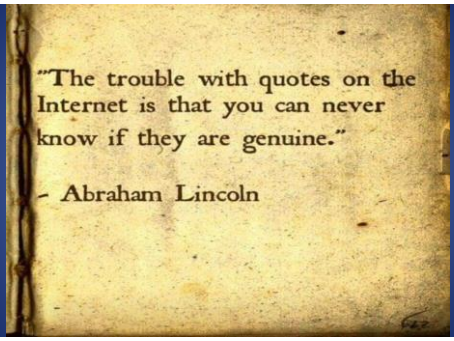




'God made the meat and the devil made the cook'

-Albert Yeomans, butcher 1913-1997.....

and Thomas Deloney 16 century



A Unique Beef Finishing Service On A Contract System

Doug Dear - A.S. & E.A. Dear & Son

FARM FACTS

- 1000 acres arable
  - 750 acres cereals
  - 150 acres rape
  - 100 acres maize
- 1500 finished cattle per year
  - 1100 clean cattle
  - 400 bulls
- LFU (Licensed Finishing Unit)
- Diet 80% Self-sufficient
- Arable and Cattle - work in unison (2 staff)

THE SYSTEM

- Farmer retained cattle
- Strict intake protocol
- Fixed overhead cost
- As fed cost (Keenan Intouch)
- Live & Dead Outlets
- Premium Product Outlets
- Option for drawing cattle

HEALTH PROTOCOLS

- **Intake Protocol has to be followed before cattle arrive**
  - Animals to be vaccinated against RSV, PI3 & Pasteurella
  - Bovipast with the addition of Bovilis IBR marker live is recommended
  - Must be completed 2 weeks before movement onto the unit
- **Arrival At Unit**
  - Drenched for worm and fluke
  - IBR for shipping disease
  - Management tag (If not already in)
  - EID (If not already in)
- **If Cattle not performing**
  - Wormed again with Zanil

FINISHER SELECTION

- 'Big Empty Houses'
- 40 day cattle
- 90 day cattle
- Young Bulls
- Cattle Selection
- End Market

BEDDING & FEEDING

- All Straw Yards
- Covered & Semi- Covered
- Feeding once per day
- Keenan Intouch
- All feed data recorded on icloud & downloaded into office
- Feed invoiced directly from Keenan
- Initial feeding calculated by bodyweight, then altered to follow the growth curve
- Straw for muck

HANDLING & WEIGHING

- Full bespoke handling system
- All cattle weighed on entry and exit
- Check weighed periodically
- Batched according to outlet
- Multi customer loads

FUTURE PROJECTS

- Automatic Weigh crate
- InTouch linked with weight information

FINISHER DIET

Feedstuff

- Straw – Wheat
- Maize Silage
- Barley rolled
- Northern Crop Driers – Grass Nuts
- Faba Bean Screenings
- Minerals plus RumiTech
- Alkacid
- Regu Pro 38

- **FCR 5:1 to 9:1**
- **Protein Level 13.1**
- **ME 12.2 MJ/Kg DM**
- **DM 65.3%**
- **Starch & Sugar 43.3**
- **Aiming for 2.0 kg/day LWG**
- **£/kg LWG 1.04**

THE FINISHED ANIMAL

Bulls

- 300 to 360 kg
- 12-14 months old
- R3/4L

Clean Cattle

- Market Specific
- Markets Supplied
- Factory cattle
- Live Market cattle
- Movements

Benefits of Custom Feeding

- Customers have access to valuable information on growth/feed conversion rates.
- Ability to track the animals from breeding right through to slaughter
- EBV data
- Dedicated finishing unit
- Access to new markets and the opportunity to increase production.
- Access to UK market prices
- Opportunity to improve income

Healthy Cattle Healthy Profits
The Better Farm Beef Challenge Experience

Francis Breen

Partnership

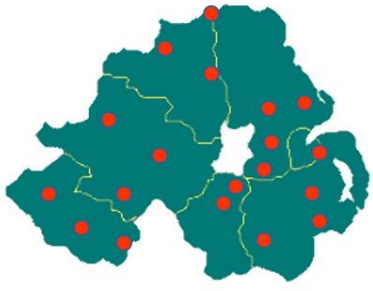
Objectives

- Improve the profitability of participating farms using Knowledge and Technology Transfer (KTT).
  - One to One advice
  - Group Discussion
- Achieve an average Gross Margin of at least £750 per hectare
  - Benchmarking used as the basis for all planning

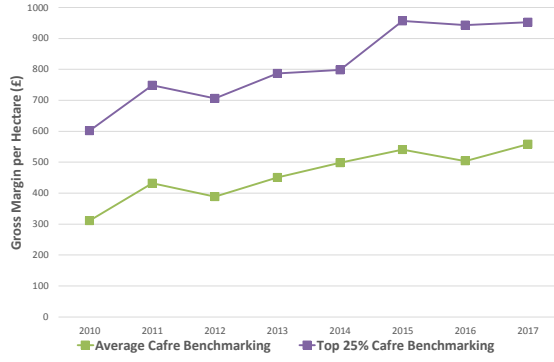
Objectives

- Communicate key messages:
  - Weekly press articles ***The Irish Farmers Journal***
  - Farm walks
  - Conferences
  - Mart events
  - Other publicity

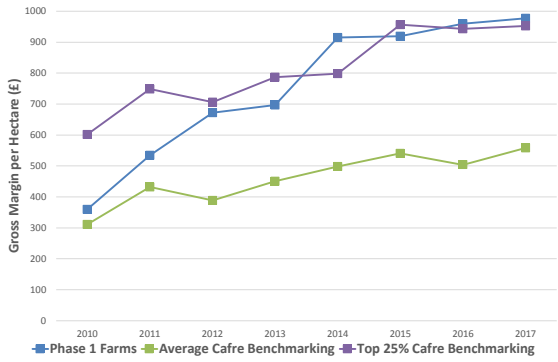
Farm Locations



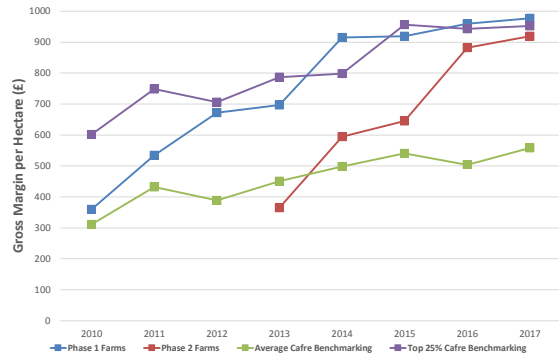
Gross Margin per Hectare – Average & Top 25% of CAFRE Benchmarked farms



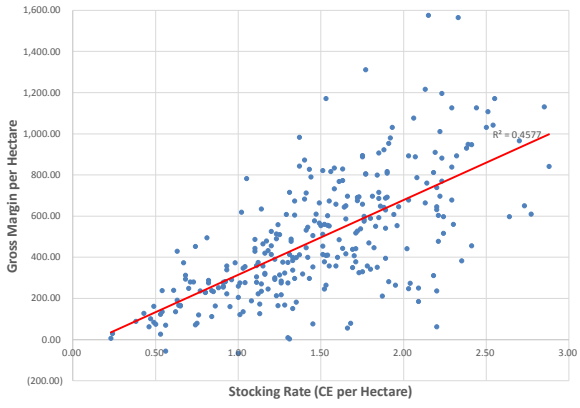
Gross Margin per Hectare – Better Farm Beef Challenge vs Average & Top 25% of CAFRE Benchmarked farms



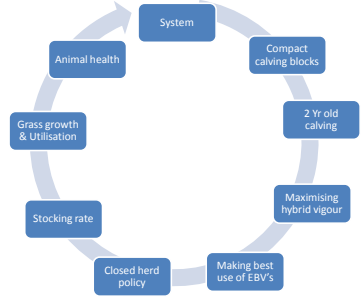
Gross Margin per Hectare – Better Farm Beef Challenge vs Average & Top 25% of CAFRE Benchmarked farms



Correlation between Stocking Rate and Gross Margin per Hectare



Improving profitability



BETTER FARM BEEF CHALLENGE NI

cafre College of Agriculture, Food & Rural Enterprise

Drivers of profitability – Better Farm Beef Challenge

	1	2	3	4	5	6	7	8	9	10
Gross Margin £/HA (2017)	£1357	£1116	£1088	£989	£870	£802	£790	£722	£701	£667
Compact calving blocks < 12 weeks										
Calving heifers at 24 months										
Calving Index <380 days										
Mortality < 8%										
Closed herd policy										
Socking rate > 2.00 CE/HA										
Grass growth > 10T DM/Ha										
Breed selection using EBV's										

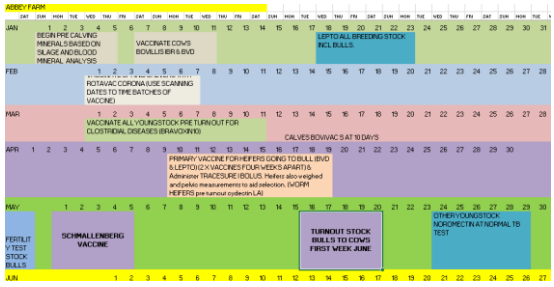
Focus On Animal Health

- Learning from phase 1 experience
- Detailed Animal health plans
- Where required Standard Operating Procedures (SOP's)
  - We are NOT Vets
  - But we can facilitate this process

BETTER FARM BEEF CHALLENGE NI

cafre College of Agriculture, Food & Rural Enterprise

Focus On Animal Health



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Focus On Animal Health – Benefits

- Reduced veterinary call outs
- Similar overall veterinary cost
- More targeted use of vaccines and reduced antibiotic usage
- Reduced morbidity
- Better animal health = better animal performance
- Better mental health for farmer

BETTER FARM BEEF CHALLENGE NI

cafre College of Agriculture, Food & Rural Enterprise

Joe Milligan
Castlewellan Co Down

Farm Details

- Partnership
- 90 ha - 3 land blocks

3 Enterprises
- Suckled calf to beef
- Dairy calf to beef
- Commercial sheep

BETTER FARM BEEF CHALLENGE NI

Past /current direction of the farm

PAST
- Replacements from the dairy herd
- Progeny sold live at 23-24 months
- SR < 1.70 CE / Ha
- Small dairy calf to beef enterprise
- 150 ewes
- Not fulfilling grassland potential

PRESENT
- Shift to home bred replacements
- Stock finished at a much younger age (Bulls @ 13-14 months)
- SR - 2.46 CE / ha
- 55 Dairy calf to beef enterprise (AA)
- 300 ewes
- Reaching grassland potential

BETTER FARM BEEF CHALLENGE NI

Key priorities to help us achieve suckler herd potential

- Having a system
- Breeding
- A focus on grass (output/ha)
- Management practices
- ***Herd health***

BETTER FARM BEEF CHALLENGE NI

Suckler to Beef - System

- 2 x 8 week calving periods – April/May & August/September
- Male progeny finished as bulls and steers
- Heifers finished off farm at 18-20 months
- Surplus breeding heifers sold (in-calf)

BETTER FARM BEEF CHALLENGE NI

Suckler Herd - Breeding

- Cross breeding (hybrid vigour)
- Ruthless culling policy
- Cows must be:
  - Docile
  - Calve at 24 months
  - Calve every 365 days (2017 CI 373 days)
  - Durable and easily fleshed
  - Wean 50% of live weight (2018 = 47%)

Cows which best achieve this on our farm are 600-650 kg live weight at a condition score 3.0-3.5

BETTER FARM BEEF CHALLENGE NI

Cow type

Practices to improve performance from grazed grass

- Rotational grazing
- Monitoring grass supplies weekly
- Mixed grazing utilised as much as possible
- Young stock grazed on reseeded swards and after-grass
- Forward creep grazing

Management practices to increase output

- **Cull cows earlier**
- **Transfer calves**
- **Wean calves earlier**
- **Maintain tight calving period**
- **Finish cattle earlier – more economic**

BETTER FARM BEEF CHALLENGE NI

Improvements made on the farm

Year	Homebred male animals
2010	Strong stores 23/24 months 500-600 KG LW
2013	Steers slaughtered at 22 months 340 KG DW
2015	Steers slaughtered 19 months 360 KG DW
2017	60% as bulls at 12.8 months 378 KG DW
	Steers slaughtered 19 months at 370 KG DW

Mortality from scanning to 6 weeks post calving

2010: 10%

2018: 4%

Daily live-weight gain on the cow

2010: 0.9 KG LW/Day
2014: 1.2 KG LW/Day
2018: 1.4 KG LW/Day
All spring born calves reared on own mothers

BETTER FARM BEEF CHALLENGE NI

Health: Where it all begins

Health overview

- Not a closed herd
- Animal health plan in place
- Comprehensive vaccination programme
- Routine screening for main diseases
- All mortality investigated

BETTER FARM BEEF CHALLENGE NI

Health: Where it all starts for the suckled calf

- Vaccinations pre calving
- Body condition score
- Nutrition to maximise colostrum quality
- Deep bed of clean straw in the calving pens
- Hydrated lime before each calving
- Navels dipped in iodine
- Calves assisted to suckle asap after birth

The next priority is to get the cow back in-calf

Simple health plan

Jan-March	April-June
Annual salmonella booster	Bvd + Lepto cows
Rotavac cows	1st and 2nd bvd + lepto rep heifers
1st + 2nd bravoxin 10 autumn calves	1st + 2nd bravoxin spring calves
Booster bravoxin 10 all stock	Salmonella vaccine autumn herd
Bolus cows 6 weeks pre calving	Faecel egg count growing stock
Bolus all young stock going to grass	Worm growing cattle when necessary

July -Oct	Nov- Dec
Rotavac autumn herd	Autumn calves booster pneumonia vaccine
2nd Worm dose to stock / 3rd if necessary	All Stock treated for fluke, worms and lice
1st +2nd IBR and Bovipast spring calves	
1st vaccine IBR and Bovipast autumn calves	

BETTER FARM BEEF CHALLENGE NI

Challenges we have faced!

- High lung worm burden in yearling cattle
- Young stock susceptible to pneumonia leading to ill thrift in some animals
- Reduced immune system causing recurrent pneumonia problems
- Extra workload
- Salmonella
- Coccidiosis
- Cryptosporidium (dairy calves)

BETTER FARM BEEF CHALLENGE NI

Veterinary costs

2010

- Vaccinations made up 28% of vet costs
- Call outs/treatment 30%
- Remainder mostly antibiotics

2017

- Vaccinations made up 69% of vet costs
- Call outs/treatment 5%
- Antibiotics 25%
- Faecal egg counting also undertaken

We continually benchmark physical and financial performance

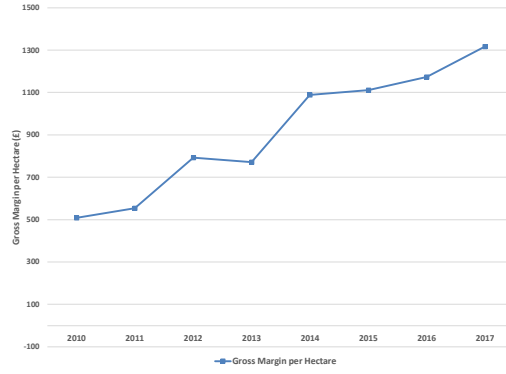
BETTER FARM BEEF CHALLENGE NI

Looking forward to reduce health issues

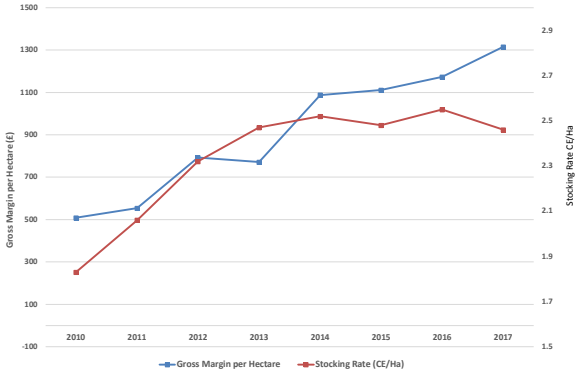
- Improve ventilation in sheds
- Shift spring calving closer to turn out
- Autumn herd calving outdoors
- More regular pre and post treatment faecal egg monitoring
- Possible testing of colostrum
- Soyabean meal pre calving to improve colostrum quality

BETTER FARM BEEF CHALLENGE NI

Gross Margin per Hectare (£) and Stocking Rate per Hectare (CE) 2010-2017



Gross Margin per Hectare (£) and Stocking Rate per Hectare (CE) 2010-2017



'In our eyes it's about having as many numbers in and out through the door, as quickly and efficiently as possible'

Looking forward- still room to improve

- Optimise output from the resources at our disposal
- Maintain a fertile functional suckler cow (CI: 365 days)
- Keep mortality to a minimum
- Strive to better live weight gains year on year
- Maximise performance from a grass-based system
- Finally:

  To keep improving the business to withstand volatility but to reap the benefits in good times

BETTER FARM BEEF CHALLENGE NI

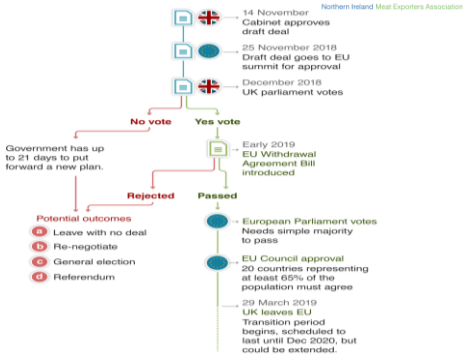
Conall Donnelly
NI Beef Conference
21 November 2018

Northern Ireland Meat Exporters Association

Brexit & The Beef Market

Brexit: State of Play

The Process from here



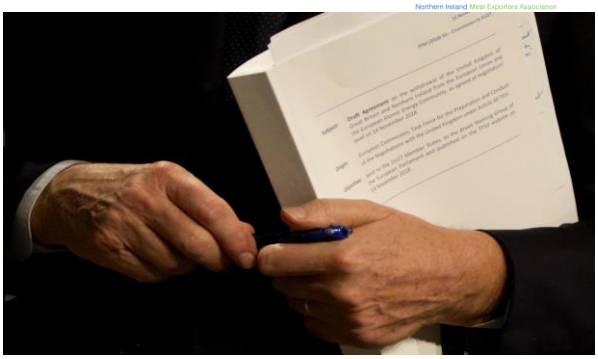
Uncertainty

~~No~~ Any Deal is Better than ~~a Bad~~ No Deal?

Red Lines on Both Sides

UK Red Lines	EU Red Lines
Independent Trade Policy	Indivisibility of the Single Market
Reduce payments to EU budget	Integrity of the Single Market
Take control of immigration policy	Level Playing Field
No Hard Border on Island of Ireland	No Hard Border on Island of Ireland

The Draft Withdrawal "*Agreement*"



Conall Donnelly
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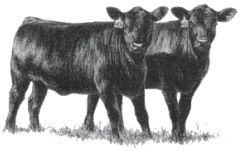
Conclusion