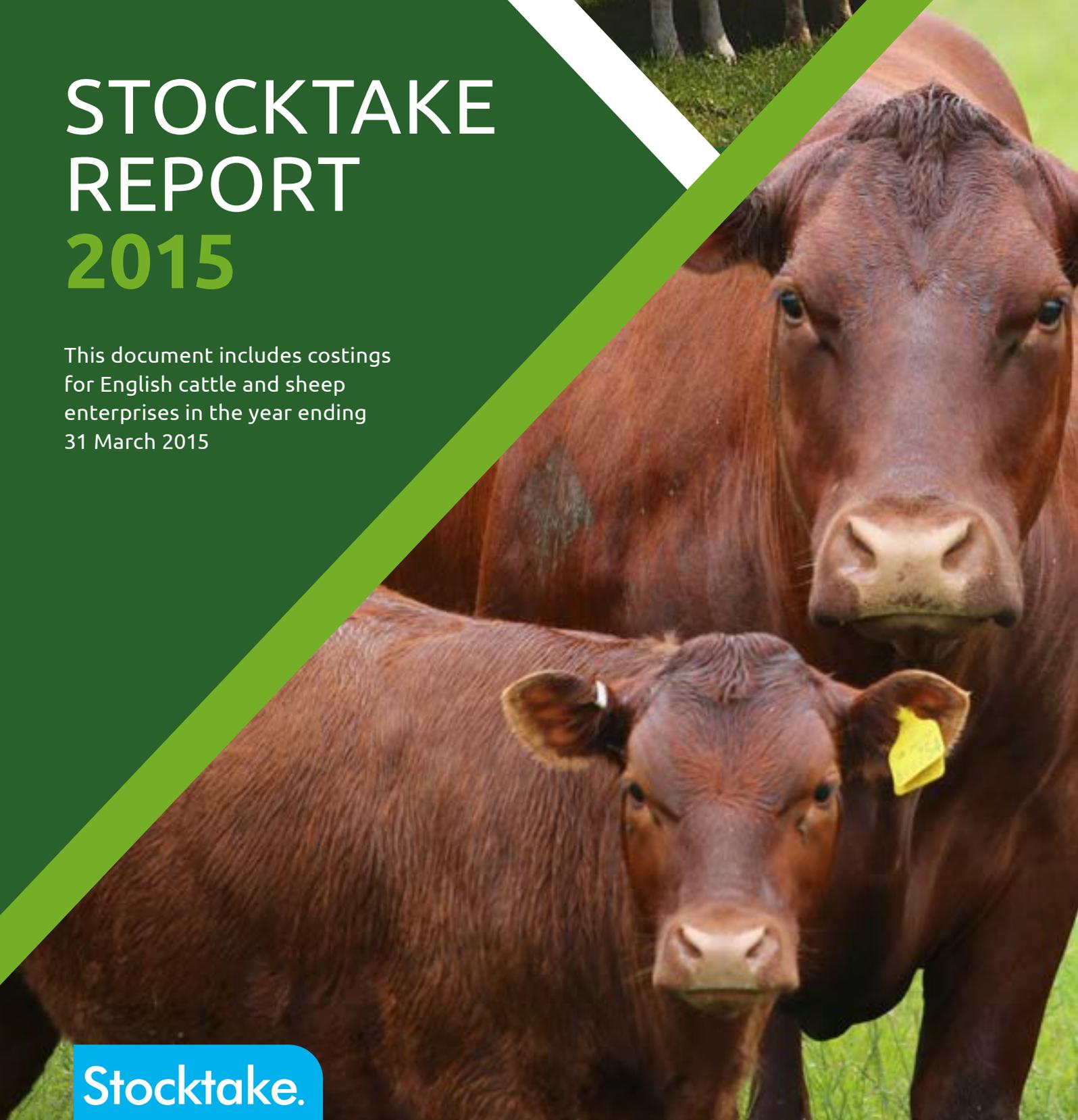




STOCKTAKE REPORT 2015

This document includes costings
for English cattle and sheep
enterprises in the year ending
31 March 2015



Stocktake.

CONTENTS

Welcome.....	1
Glossary of abbreviations.....	1
Cost and price changes during 2014.....	2
Suckler herds	4
Suckler herds - international comparisons.....	5
Non-SDA suckler herds.....	6
SDA suckler herds.....	8
Spring and autumn calving suckler herds.....	10
Combined breeding herd/beef.....	12
Beef enterprises	14
Beef enterprises - international comparisons.....	15
Beef stores.....	16
Beef finishing.....	18
Sheep enterprises	20
Sheep enterprises - international comparisons.....	21
Non-SDA breeding flocks.....	22
SDA breeding flocks.....	24
Non-SDA February/March lambing flocks.....	26
Non-SDA April/May lambing flocks.....	28
Store lamb finishing.....	30
How the Stocktake data is compiled.....	32

© Agriculture and Horticulture Development Board 2015. All rights reserved.

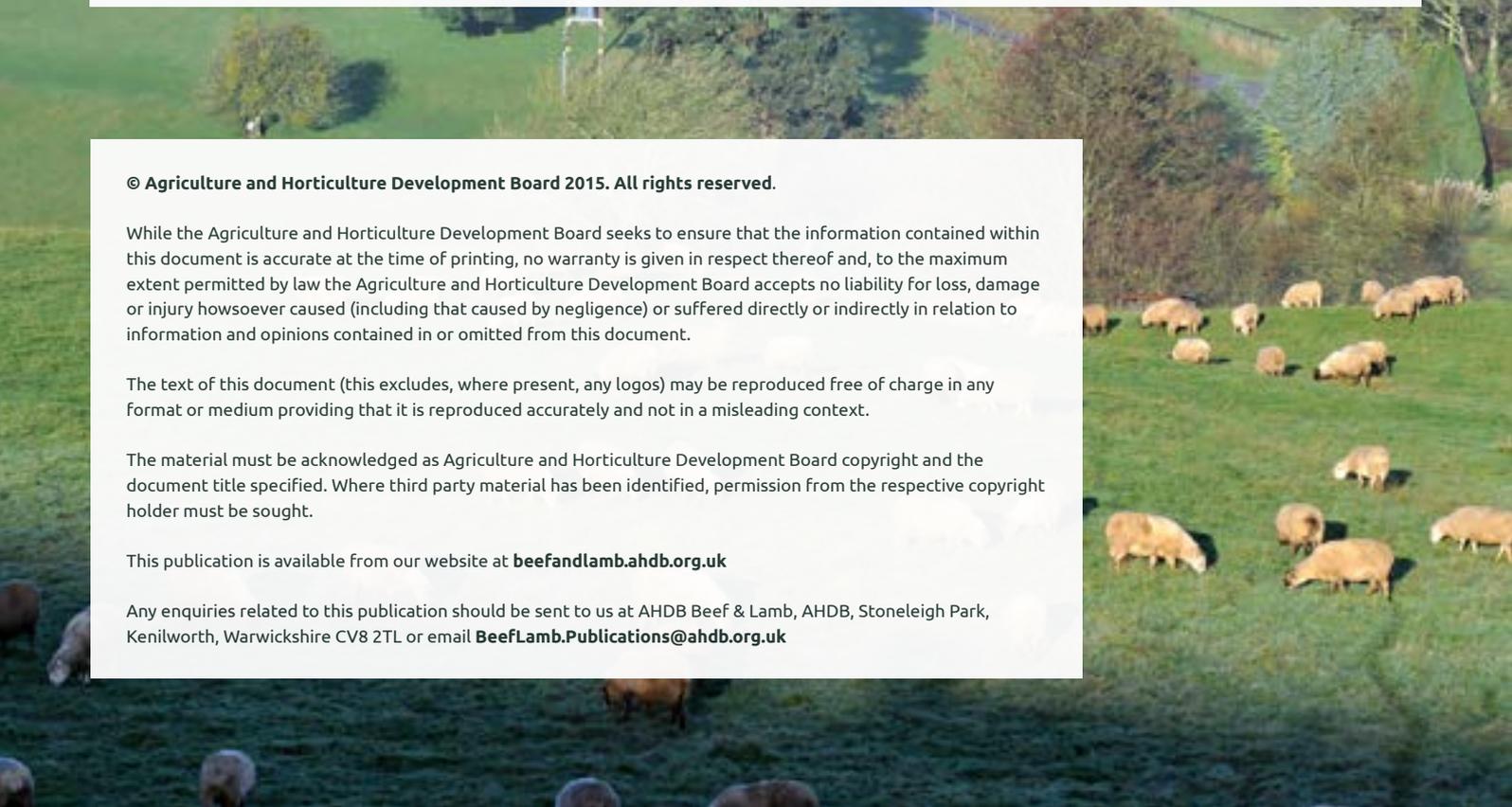
While the Agriculture and Horticulture Development Board seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document.

The text of this document (this excludes, where present, any logos) may be reproduced free of charge in any format or medium providing that it is reproduced accurately and not in a misleading context.

The material must be acknowledged as Agriculture and Horticulture Development Board copyright and the document title specified. Where third party material has been identified, permission from the respective copyright holder must be sought.

This publication is available from our website at beefandlamb.ahdb.org.uk

Any enquiries related to this publication should be sent to us at AHDB Beef & Lamb, AHDB, Stoneleigh Park, Kenilworth, Warwickshire CV8 2TL or email BeefLamb.Publications@ahdb.org.uk





WELCOME

Welcome to the Stocktake Report 2015, a reference document for the English beef and lamb meat industry against which producers can benchmark their own performance and enterprise costs.

The AHDB in-house team collected a wide variety of on-farm data from a range of farms and enterprises with production years ending in the period between April 2014 and March 2015. This report analyses the economic margins for beef and sheep farm enterprises only, rather than looking at whole farm businesses. There are a number of other income streams that help make many farm businesses viable when beef and sheep enterprises are producing negative margins, including the Basic Payment Scheme, Environmental Stewardship and diversification, including off-farm income.

This year, the data has been presented showing margins after cash-only costs and margins on a full economic basis. All area-based support payments continue to be excluded. While global factors have an effect on prices, producers are able to influence

many factors that affect the bottom line, notably physical performance and costs. Managing costs while optimising output should ensure that businesses are able to cope with periods of volatility.

Also new for this year are international comparisons, showing typical English farms compared with typical farms in other beef and lamb-producing countries. The countries chosen tend to be UK competitors in the global market.



Giles Blatchford
AHDB Head of Farm Economics

GLOSSARY OF ABBREVIATIONS

CAP	–	Common Agricultural Policy	Kg	–	Kilogrammes
CW	–	Carcase Weight	FW	–	Fresh weight
DLWG	–	Daily Liveweight Gain	LU	–	Livestock Unit
DM	–	Dry matter	Lwt	–	Liveweight
Dwt	–	Deadweight	SDA	–	Severely Disadvantaged Area
Ha	–	Hectare			

COST AND PRICE CHANGES DURING 2014

Chart 1: GB deadweight steer price

Cattle prices started 2014 higher than a year earlier, but dropped and remained below 2013 prices from February onwards. The start of 2015 saw prices trending below both of the two previous years, falling to a low point in May. This price period reflects the beef enterprises selling finished cattle in this Stocktake report.

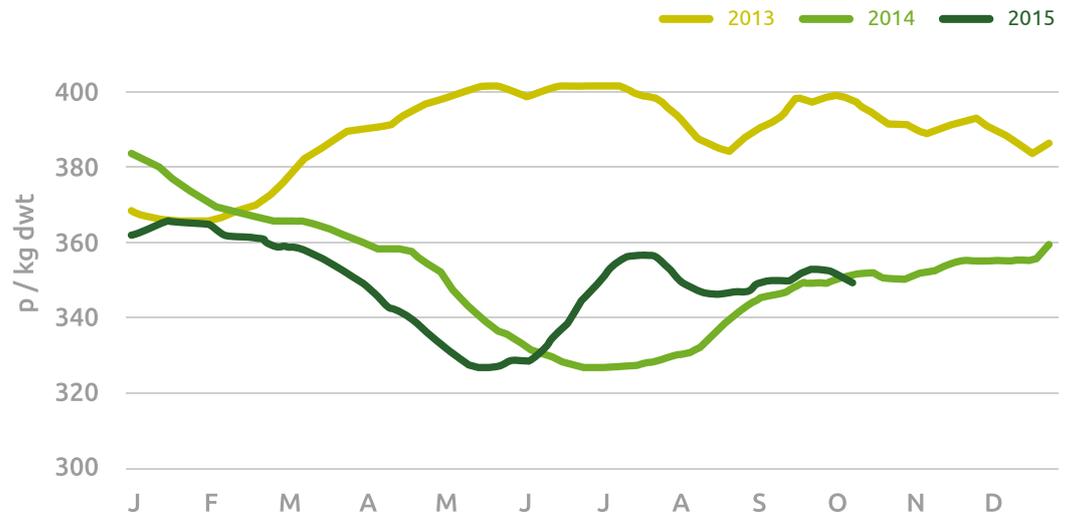


Chart 2: Continental cross yearling steers

In contrast to finished beef prices, store cattle prices in 2014 did not fall significantly below year-earlier levels. Into 2015 store prices have been particularly firm, above both 2013 and 2014 prices for almost all of the year so far. Beef enterprises selling yearling 2014 spring-born weaned calves in this report will have benefitted from the strength in this market.

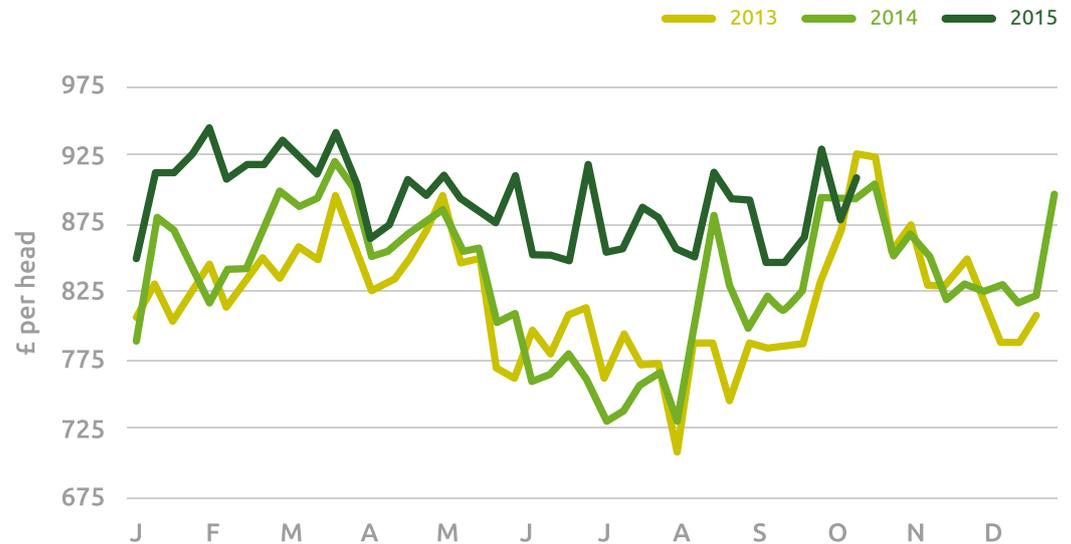


Chart 3: GB deadweight lamb price SQQ

In 2014, deadweight lamb prices generally followed the regular seasonal trend. However, increased numbers put significant pressure on the trade and average prices dropped below year-earlier levels in July. Again following the seasonal trend, prices recovered in the autumn to go above 2013 prices at the end of November. The breeding sheep enterprises in this report will have been selling lambs into this lower price market.

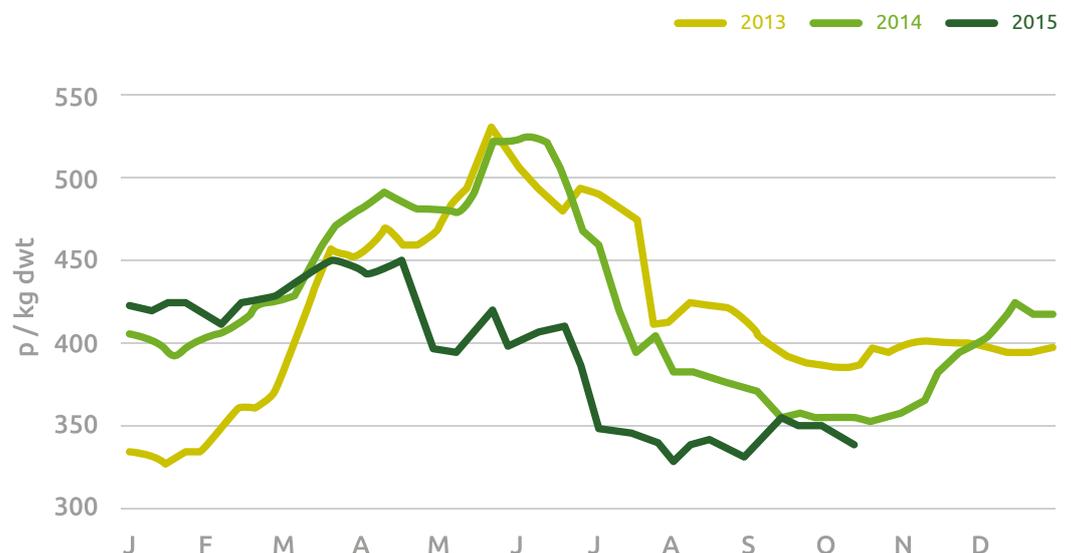


Chart 4: GB store lamb price

The better deadweight prices at the end of last year and in the early months of 2015 will have benefitted the store lamb enterprises in this Stocktake report. Early season 2014 store lamb prices were, on average, below year-earlier levels, however, they did strengthen in the later part of the year. The store lamb enterprises in this report will have purchased lambs in this market. Given the evolution of finished prices in 2015, returns will have depended on when these lambs were sold finished.

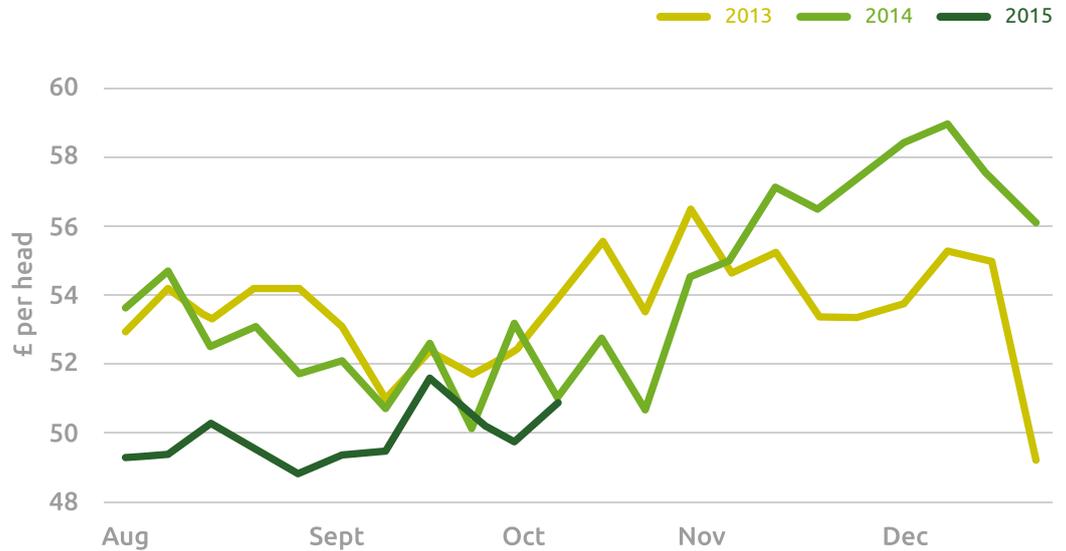
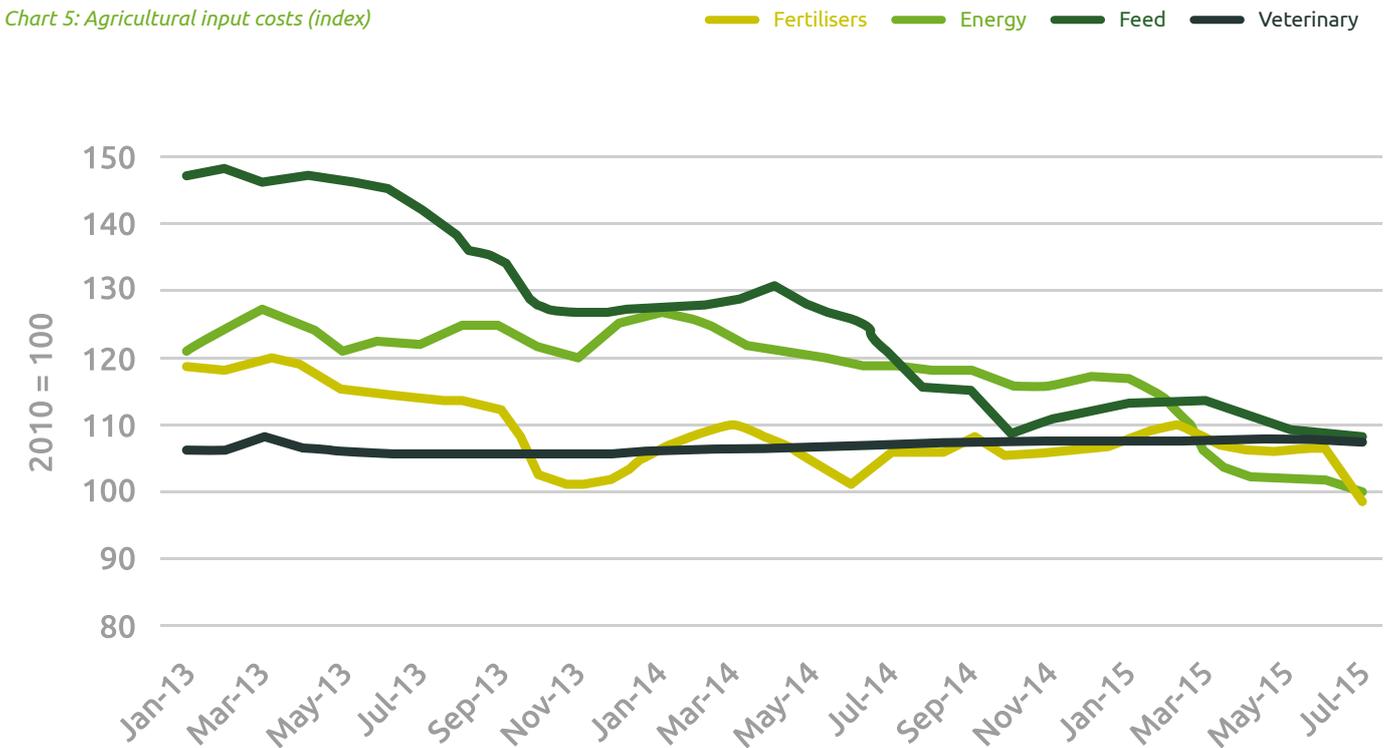


Chart 5: Agricultural input costs (index)



Enterprises in the report will have been affected by different input cost trends. Breeding sheep and suckler herds were fed during the winter months of 2013/14 when feed prices were significantly lower than in the previous year, due to abundant global crop yields and lower prices. Continued lower feed prices will have benefitted beef and store lamb enterprises finishing animals in 2014/15.

Fertilisers applied in the spring of 2014 also cost less than in the previous year, benefitting any conserved forage for 2014/15 winter feeding. Energy costs in this chart are a combination of fuel and electricity. While overall energy costs were relatively stable over the 2013/14 winter period, the summer of 2014 should have benefitted from slightly lower energy costs. The more recent lower oil price particularly affects the overall energy index in the spring of 2015 and therefore will not have a significant impact on the enterprises in this report.

SUCKLER HERDS

Suckler herd data is obtained from a range of farms with production years ending in the period April 2014 to March 2015. The top and bottom thirds are identified based on the full economic net margin. This means that all other financial and physical performance figures are for the farms in these datasets and are not the top and bottom third for each individual trait.

NON-SEVERELY DISADVANTAGED AREA (NON-SDA) SUCKLER HERDS

Suckler cow enterprises kept on any land defined as non-SDA by Defra. The grass areas can range from short and long-term leys to permanent pasture and the output from the suckler herd is a calf at weaning.

- Average and top third net margins are still negative on a full economic net margin basis, however, these have improved compared to the last two years
- On average, producers have achieved a positive cash only net margin
- Top third have higher numbers of cows scanned in calf per 100 cows to bull
- Top third have higher numbers of calves born alive
- Top third have a higher percentage of calves born in the first three weeks
- Top third producers had a higher output and lower replacement cost
- The top third's main cost savings were in depreciation and labour

SEVERELY DISADVANTAGED AREA (SDA) SUCKLER HERDS

Suckler cow enterprises kept on land classified as SDA by Defra. The output from the suckler herd is a calf at weaning.

- While average producers are still losing money on a full economic net margin basis, top third producers are making a positive full economic net margin
- On average, producers achieved a positive cash only net margin
- Top third have higher numbers of cows scanned in calf per 100 cows to bull
- Top third have higher numbers of calves born alive
- Top third producers have lower feed and forage costs and, while their concentrate cost per tonne is higher, they have fed less quantity
- Home-grown forage costs are lower, while also feeding less quantity
- Top third producers have lower fixed costs, in particular lower contracting costs

SPRING AND AUTUMN CALVING HERDS

These herds are suckler cow enterprises kept on land defined as non-SDA or SDA by Defra and who calve specifically in the spring or the autumn. The autumn-born calves in this sample are older, and therefore heavier, at weaning than the spring-born calves.

- Spring and autumn-calving herds both produce negative margins on a full economic net margin basis
- On average, spring and autumn-calving herds produce a positive margin on a cash only net margin basis
- Care should be taken making a direct comparison between spring and autumn-calving as the autumn-born calves are weaned at an older age and therefore a higher weight and value
- The dataset for the autumn-born calving herds is relatively small and this sample is achieving a higher percentage of cows scanned in calf and a higher number of calves born alive when compared to the spring-calving dataset
- When to calve must always be a farm-specific decision

COMBINED BREEDING/BEEF FINISHING AND COMBINED BREEDING/BEEF STORES

These enterprises are a combination of the suckler cow herd and the related beef enterprise(s) on the same farm. The suckler herds may be kept on land classified as non-SDA or SDA. For those defined as combined breeding/beef finishing, the majority of calves are sold finished. For those defined as combined breeding/beef stores the majority of calves are sold as stores.

- On average, combined breeding/finishing enterprise full economic net margins have declined compared to last year and combined breeding/store margins have improved, although both remain negative
- In both systems, gross output has fallen compared to last year
- In both systems, total variable and fixed costs have fallen compared to the previous year



SUCKLER HERDS

INTERNATIONAL COMPARISONS

These international comparisons are provided by the agri benchmark international comparison network. There are 25 country members of the cow-calf (suckler) group with 60 'typical' farms. Comparisons are based on an internationally standardised method of establishing and analysing typical virtual farms that represent production systems and their profitability in each country. The results are shown in US Dollars (USD) as an international comparison base. For more information visit www.agribenchmark.org

The UK trades and competes in a global market and is therefore affected by exchange rates as well as any competitive cost of production. The countries in the chart have been chosen to represent the UK's main competitors and exporting environment for commercial beef. The numbers with each country indicate the number of cows put to the bull each year. When viewing as a pdf, hovering over the name on the bottom axis of the chart gives more information about each typical farm.

The chart is shown in ascending order of total suckler herd returns (weaned calves, cull cows) because globally, farmers tend to have little control over their market price. Farmers worldwide have to manage their businesses by optimising

output and managing costs within the price framework available to them.

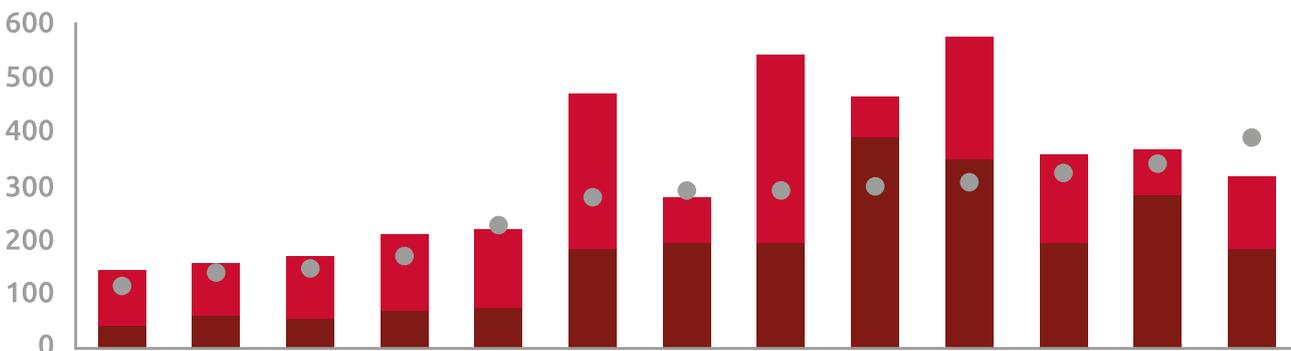
The majority of farms are sustainable in the short term as their returns cover their cash costs and often enable them to cope with any volatility. Many farms indicate a lack of sustainability in the long term, as the suckler herd returns are not covering their total costs. In other words, returns from suckler herds are not providing sufficient income to cover their non-cash fixed costs of family labour, return on owner-occupied land and depreciation.

Suckler herd returns do not include any CAP payments received by European countries.

Chart 1: Suckler herds 2014 (USD per 100kg lwt) in order of suckler herd returns

**Hover country name with your mouse for explanations*

- Cash cost
- Non-cash
- Suckler herd returns



SUCKLER HERDS

NON-SDA SUCKLER HERDS

Non-SDA suckler herds	Top third	Average	Bottom third
Number of herds in sample	26	80	26
Average herd size (cows to bull)	96	83	76

Financial performance (£ per cow to bull)	Top third	Average	Bottom third
Calf output	594.59	523.34	463.86
Other income	3.40	3.07	6.06
Gross output	597.99	526.41	469.92
Replacement costs	41.15	61.55	84.96
Output less replacement costs	556.84	464.86	384.96

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	27.64	32.63	21.09
Home-grown feed	13.73	9.97	10.43
Purchased forage	13.40	14.30	10.70
Home-grown forage (excludes contract)	40.67	48.94	57.53
Total feed and forage	95.44	105.84	99.75
Vet and medicine	27.73	29.15	32.70
Bedding	25.94	31.74	41.23
Other livestock expenses	15.52	17.55	17.93
Total variable costs	164.63	184.28	191.61

Gross margin	392.21	280.58	193.35
---------------------	---------------	---------------	---------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	53.05	60.17	78.89
Machinery repairs and spares	16.99	19.39	25.74
Contracting	46.51	46.32	50.15
Electricity	1.25	1.89	2.47
Fuel	20.48	24.47	32.47
Property maintenance and water	14.54	15.72	18.47
Land rent (actual)	46.90	62.70	74.67
Overheads	17.03	19.38	19.20
Cash only fixed costs	216.75	250.04	302.06
Cash only cost of production	422.53	495.88	578.63
Cash only net margin	175.46	30.53	-108.71

Depreciation	54.75	76.35	115.72
Finance costs (imputed)	31.38	32.46	37.54
Labour - unpaid (imputed)	61.85	77.48	108.90
Land rent (imputed)	70.35	62.70	95.03
Non-cash fixed costs	218.34	248.99	357.19
Full economic fixed costs	435.10	499.03	659.25
Full economic cost of production	640.87	744.86	935.82
Full economic net margin	-42.88	-218.45	-465.90



Physical performance	Top third	Average	Bottom third
Cow to bull ratio	34	32	29
Age at first calving			
Herds 2 year policy (%)	27	42	50
Herds 2.5 year policy (%)	46	42	35
Herds more than 2.5 year policy (%)	27	16	15
Reproductive performance			
Percentage of cows/heifers scanned in calf (%)	94	91	86
Calves born alive per 100 cows/heifers to bull	92	89	88
Calves born dead per 100 cows/heifers to bull	2	3	3
Calves died from birth to weaning per 100 cows/heifers to bull	4	3	3
Calves weaned per 100 cows/heifers to bull*	87	85	84
Calf losses from birth to weaning (% of born alive)	4	4	4
Calving period (first to last calf - weeks)	15.7	18.2	17.4
Cows and heifers calving in first 3 weeks (%)	37.2	33.4	32.8
Empty cows/heifers (%)	6.4	7.8	8.6
Cow mortality (%)	1.8	2.3	2.2
Herd replacement rate (%)	16.1	17.2	14.6
Production performance			
Average age at weaning (days)	236	227	219
Average weight at weaning (kg per head)	306	285	259
Daily liveweight gain to weaning (kg per day)	1.1	1.1	1.0
Weaned calf weight produced per forage hectare (kg at 200 days)	318	254	181
Financial performance			
Return per calf (£ per head)	684	616	557
Calf price (£ per kg lwt)	2.24	2.16	2.15
Weaned calves sold at weaning (%)	7	11	18
Weaned calves retained at weaning (%)	93	89	82
Feed efficiency			
Total FW cow concentrate use (kg per cow)	92	310	168
Total DM cow concentrate use (kg per cow)	74	151	118
Average concentrate cost (£ per tonne)	189	129	170
Total FW forage (kg per cow)	5223	4778	5673
Total DM forage (kg per cow)	1680	1660	1976
Creep feed fed (kg per calf weaned)	59	38	11
Management			
Number of grazing weeks	35	35	35
Stocking rate (LU per ha)	1.6	1.3	1.0
Inorganic nitrogen use (kg per ha)	42	36	25
Labour			
Labour use - paid hours per cow	5.2	5.7	7.9
Labour use - unpaid hours per cow	6.6	7.8	10.9

*includes calves purchased to put on cows

SDA SUCKLER HERDS

SDA suckler herds	Top third	Average	Bottom third
Number of herds in sample	13	41	13
Average herd size (cows to bull)	67	70	78

Financial performance (£ per cow to bull)	Top third	Average	Bottom third
Calf output	649.49	601.73	546.25
Other income	0.17	0.40	0.00
Gross output	649.66	602.13	546.25
Replacement costs	36.60	59.21	82.88
Output less replacement costs	613.06	542.92	463.37

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	27.60	42.94	65.04
Home-grown feed	0.64	3.42	0.49
Purchased forage	4.20	8.54	13.43
Home-grown forage (excludes contract)	49.10	56.53	62.33
Total feed and forage	81.53	111.43	141.30
Vet and medicine	40.68	39.35	37.56
Bedding	21.56	26.50	22.88
Other livestock expenses	21.53	16.33	15.71
Total variable costs	165.30	193.61	217.44

Gross margin	447.76	349.31	245.93
---------------------	---------------	---------------	---------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	50.82	36.21	22.48
Machinery repairs and spares	29.56	29.93	28.99
Contracting	25.83	38.59	58.75
Electricity	2.01	2.22	1.19
Fuel	26.17	29.80	31.11
Property maintenance and water	18.18	18.98	18.41
Land rent (actual)	24.31	55.40	81.26
Overheads	20.02	19.89	16.72
Cash only fixed costs	196.90	231.03	258.93
Cash only cost of production	398.81	483.85	559.25
Cash only net margin	250.85	118.28	-13.00

Depreciation	76.64	81.15	78.62
Finance costs (imputed)	36.53	37.01	36.29
Labour - unpaid (imputed)	65.20	83.12	89.77
Land rent (imputed)	49.35	41.79	45.71
Non-cash fixed costs	227.72	243.07	250.39
Full economic fixed costs	424.62	474.10	509.32
Full economic cost of production	626.53	726.92	809.64
Full economic net margin	23.13	-124.79	-263.39



Physical performance	Top third	Average	Bottom third
Cow to bull ratio	30	29	27
Age at first calving			
Herds 2 year policy (%)	31	49	54
Herds 2.5 year policy (%)	54	41	38
Herds more than 2.5 year policy (%)	15	10	8
Percentage of cows/heifers scanned in calf (%)	92	86	81
Calves born alive per 100 cows/heifers to bull	88	86	81
Calves born dead per 100 cows/heifers to bull	3	3	4
Calves died from birth to weaning per 100 cows/heifers to bull	2	2	4
Calves weaned per 100 cows/heifers to bull*	88	86	82
Calf losses from birth to weaning (% of born alive)	2	3	4
Calving period (first to last calf - weeks)	14.6	17.6	20.1
Cows and heifers calving in first 3 weeks (%)	30.6	31.9	34.2
Empty cows/heifers (%)	10.3	12.0	15.7
Cow mortality (%)	1.5	1.8	2.1
Herd replacement rate (%)	13.8	17.0	20.6
Average age at weaning (days)	232	236	225
Average weight at weaning (kg per head)	296	294	269
Daily liveweight gain to weaning (kg per day)	1.1	1.1	1.0
Weaned calf weight produced per forage hectare (kg at 200 days)	217	223	168
Return per calf (£ per head)	744	708	677
Calf price (£ per kg lwt)	2.51	2.43	2.54
Weaned calves sold at weaning (%)	12	11	16
Weaned calves retained at weaning (%)	88	89	84
Total FW cow concentrate use (kg per cow)	68	86	76
Total DM cow concentrate use (kg per cow)	59	68	64
Average concentrate cost (£ per tonne)	251	228	296
Total FW forage (kg per cow)	5317	5683	6054
Total DM forage (kg per cow)	1580	1701	1831
Creep feed fed (kg per calf weaned)	22	110	218
Number of grazing weeks	32	30	29
Stocking rate (LU per ha)	1.1	1.2	1.0
Inorganic nitrogen use (kg per ha)	39	44	22
Labour use - paid hours per cow	5.8	3.7	1.8
Labour use - unpaid hours per cow	6.8	8.4	8.9

*includes calves purchased to put on cows

SPRING AND AUTUMN CALVING SUCKLER HERDS

Spring and autumn calving suckler herds	Spring calving average	Autumn calving average
Number of herds in sample	74	12
Average herd size (cows to bull)	79	25

Financial performance (£ per cow to bull)	Spring calving average	Autumn calving average
Calf output	530.03	614.73
Other income	1.42	0.00
Gross output	531.46	614.73
Replacement costs	61.72	79.52
Output less replacement costs	469.74	535.21

Variable costs	Spring calving average	Autumn calving average
Purchased feed including minerals	32.44	57.66
Home-grown feed	6.76	13.56
Purchased forage	15.39	2.67
Home-grown forage (excludes contract)	44.46	44.42
Total feed and forage	99.05	118.30
Vet and medicine	29.52	23.30
Bedding	28.29	34.49
Other livestock expenses	16.58	20.35
Total variable costs	173.44	196.44

Gross margin	296.30	338.77
---------------------	---------------	---------------

Fixed costs	Spring calving average	Autumn calving average
Labour - paid	57.83	39.17
Machinery repairs and spares	21.41	16.63
Contracting	48.06	23.87
Electricity	2.13	1.80
Fuel	23.90	30.44
Property maintenance and water	16.29	27.78
Land rent (actual)	62.77	48.38
Overheads	19.48	25.74
Cash only fixed costs	251.87	213.81
Cash only cost of production	487.02	489.77
Cash only net margin	44.44	124.96

Depreciation	63.80	85.67
Finance costs (imputed)	31.86	41.11
Labour - unpaid (imputed)	67.08	83.43
Land rent (imputed)	53.47	35.04
Non-cash fixed costs	216.20	245.25
Full economic fixed costs	468.06	459.06
Full economic cost of production	703.22	735.02
Full economic net margin	-171.76	-120.29



Physical performance	Spring calving average	Autumn calving average
Cow to bull ratio	31	34
Age at first calving		
Herds 2 year policy (%)	35	60
Herds 2.5 year policy (%)	49	20
Herds more than 2.5 year policy (%)	16	20
Percentage of cows/heifers scanned in calf (%)	90	95
Calves born alive per 100 cows/heifers to bull	88	92
Calves born dead per 100 cows/heifers to bull	3	3
Calves died from birth to weaning per 100 cows/heifers to bull	3	2
Calves weaned per 100 cows/heifers to bull*	85	90
Calf losses from birth to weaning (% of born alive)	3	2
Calving period (first to last calf - weeks)	18.6	14.3
Cows and heifers calving in first 3 weeks (%)	35.3	34.6
Empty cows/heifers (%)	8.7	5.0
Cow mortality (%)	2.4	2.0
Herd replacement rate (%)	17.9	19.0
Average age at weaning (days)	223	278
Average weight at weaning (kg per head)	282	345
Daily liveweight gain to weaning (kg per day)	1.1	1.1
Weaned calf weight produced per forage hectare (kg at 200 days)	253	389
Return per calf (£ per head)	626	683
Calf price (£ per kg lwt)	2.24	1.97
Weaned calves sold at weaning (%)	7	0
Weaned calves retained at weaning (%)	93	100
Total FW cow concentrate use (kg per cow)	293	247
Total DM cow concentrate use (kg per cow)	125	174
Average concentrate cost (£ per tonne)	123	152
Total FW forage (kg per cow)	4070	4147
Total DM forage (kg per cow)	1501	1814
Creep feed fed (kg per calf weaned)	40	100
Number of grazing weeks	35	29
Stocking rate (LU per ha)	1.3	2.2
Inorganic nitrogen use (kg per ha)	32	47
Labour use - paid hours per cow	5.4	4.2
Labour use - unpaid hours per cow	6.7	8.7

*includes calves purchased to put on cows

COMBINED BREEDING HERD/BEEF

Combined breeding herd/beef	Combined breeding/beef finishing	Combined breeding/beef stores
Number of herds in sample	27	17
Average herd size (cows to bull)	78	83

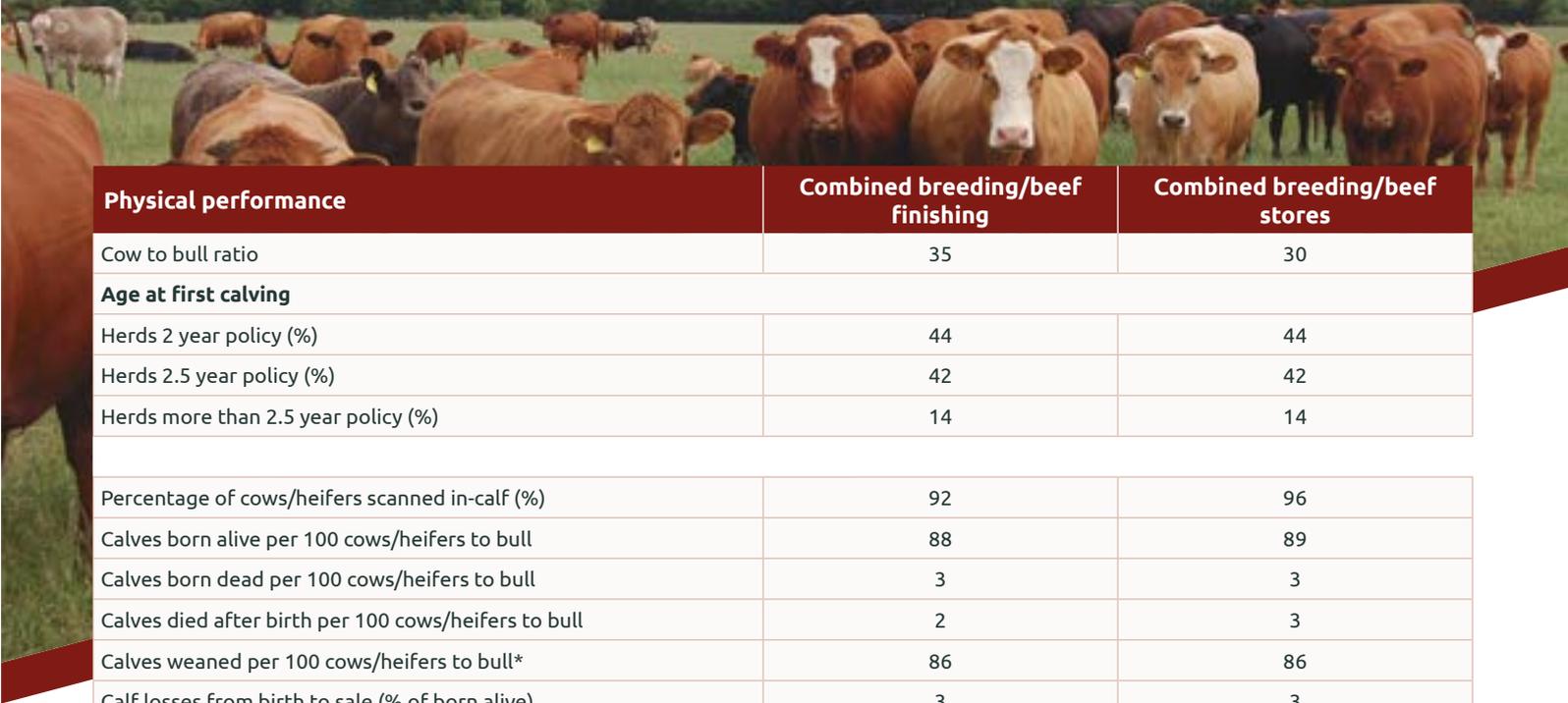
Financial performance (£ per cow to bull)	Combined breeding/beef finishing	Combined breeding/beef stores
Calf output	1013.22	789.85
Other income	0.00	1.67
Gross output	1013.22	791.52
Replacement costs	52.18	74.16
Output less replacement costs	961.04	717.36

Variable costs	Combined breeding/beef finishing	Combined breeding/beef stores
Purchased feed including minerals	180.56	134.20
Home-grown feed	49.22	6.87
Purchased forage	19.45	39.91
Home-grown forage (excludes contract)	73.44	42.41
Total feed and forage	322.67	223.38
Vet and medicine	43.60	30.46
Bedding	60.91	48.83
Other livestock expenses	42.14	42.43
Total variable costs	469.32	345.10

Gross margin	491.72	372.26
---------------------	---------------	---------------

Fixed costs	Combined breeding/beef finishing	Combined breeding/beef stores
Labour - paid	143.08	94.75
Machinery repairs and spares	31.04	30.12
Contracting	57.67	35.88
Electricity	5.26	2.20
Fuel	46.97	36.76
Property maintenance and water	42.81	23.73
Land rent (actual)	79.60	94.06
Overheads	54.07	42.72
Cash only fixed costs	460.51	360.22
Cash only cost of production	982.00	779.48
Cash only net margin	31.22	12.04

Depreciation	134.82	99.35
Finance costs (imputed)	58.91	49.14
Labour - unpaid (imputed)	89.95	87.55
Land rent (imputed)	70.59	44.26
Non-cash fixed costs	354.27	280.30
Full economic fixed costs	814.77	640.52
Full economic cost of production	1336.27	1059.78
Full economic net margin	-323.05	-268.26



Physical performance	Combined breeding/beef finishing	Combined breeding/beef stores
Cow to bull ratio	35	30
Age at first calving		
Herds 2 year policy (%)	44	44
Herds 2.5 year policy (%)	42	42
Herds more than 2.5 year policy (%)	14	14
Percentage of cows/heifers scanned in-calf (%)	92	96
Calves born alive per 100 cows/heifers to bull	88	89
Calves born dead per 100 cows/heifers to bull	3	3
Calves died after birth per 100 cows/heifers to bull	2	3
Calves weaned per 100 cows/heifers to bull*	86	86
Calf losses from birth to sale (% of born alive)	3	3
Calving period (first to last calf - weeks)	14.4	24.5
Cows and heifers calving in first 3 weeks (%)	35.3	23.6
Empty cows/heifers (%)	9.8	7.7
Cow mortality (%)	2.2	3.0
Herd replacement rate (%)	18.2	20.8

Average age at weaning (days)	230	220
Average age at sale (days)	558	454
Average weight at weaning (kg per head)	299	272
Average liveweight at sale (kg per head)	593	448
Average carcass weight (kg)	343	324
Daily liveweight gain birth to sale (kg per day)	1.1	0.9

Calf return per head finished (£)	1234	1047
Calf return per head store (£)	992	907
Liveweight sale price all animals (£ per kg lwt)	2.00	2.06
Liveweight sale price: finished cattle (£ per kg lwt)	1.95	1.73
Deadweight sale price: finished cattle (£ per kg dwt)	3.60	3.51
Calves sold finished (%)	78	6
Calves sold store (%)	22	94

Total FW cow concentrate use (kg per cow)	150	923
Average concentrate cost (£ per tonne)	161	125
Total FW forage (kg per cow)	3934	4192
Total DM forage (kg per cow)	1659	1523
Total FW calf concentrate use (kg per calf)	1567	562
Total FW forage (kg per calf)	3175	3205
Total DM forage (kg per calf)	1232	1011

Inorganic nitrogen use (kg per ha)	49	41
------------------------------------	----	----

Labour use - paid hours per cow	12.6	8.6
Labour use - unpaid hours per cow	9.1	8.4

*includes calves purchased to put on cows

BEEF ENTERPRISES

Beef enterprise data is obtained from a range of farms with production years ending in the period April 2014 to March 2015. Where applicable, the top and bottom thirds are identified based on the full economic net margin. This means that all other financial and physical performance figures are for the farms in these datasets and are not the top and bottom third for each individual trait.

Beef finishing enterprises have been sub-divided based on the average age of animals at sale.

BEEF FINISHING

These beef enterprises have sold the majority of animals as finished. The animals may have been transferred from a suckler herd and/or purchased as calves or stores at various ages. The age (up to 16 months, 16 to 24 months, over 24 months) relates to the average age of the animals when they are sold as finished.

- Gross output was similar across all beef finisher systems
- Purchase cost varied with the most expensive per head seeming to be the under 16 month systems. However, on a per kilo liveweight basis, under 16 months was the cheapest
- Feed and forage costs varied according to the type of system, with over 24 month producers having the lowest overall costs as they relied on home-grown forage rather than concentrates
- Forage use in over 24 months of age systems used double the amount of forage compared to under 16 months of age systems
- Under 16 months of age systems used nearly double the amount of concentrate on a DM basis (kg per head) than over 24 months of age systems
- Unsurprisingly, due to the length of time in the system, over 24 months had the highest labour costs
- Over 24 months also had the highest land rent costs, due to the length of time in the system and dependence on grazing
- Up to 16 months of age finishing had lower depreciation when compared to more extensive systems
- Over 24 month systems had carcass weights which, on average, were 6kg higher than the average observed in under 16 months of age finished animals

BEEF STORES

These beef enterprises sell the majority of animals as stores. They are primarily suckler calves kept at weaning for further rearing to sell as stores to other farms for finishing.

- Compared to last year, beef store enterprises still make negative margins on a full economic net margin basis
- Top third producers made a positive cash only net margin mainly due to higher output
- Looking at both purchase and sale price per kg tends to indicate that the top third producers had better quality animals
- Top third producers had lower fixed costs
- Top third producers had significantly lower non-cash costs; depreciation, unpaid labour and land rent



BEEF ENTERPRISES

INTERNATIONAL COMPARISONS

These international comparisons are provided by the agri benchmark international comparison network. There are 30 country members of the beef finishing group with 75 'typical' farms. Comparisons are based on an internationally standardised method of establishing and analysing typical virtual farms that represent production systems and their profitability in each country. The results are shown in US Dollars (USD) as an international comparison base. For more information visit www.agribenchmark.org

The UK trades and competes in a global market and is therefore affected by exchange rates as well as any competitive cost of production. The countries in the chart have been chosen to represent the UK's main competitors and exporting environment for commercial beef. The numbers next to each country name indicate the number of animals finished in a year. When viewing as a pdf, hovering over the name on the bottom axis of the chart gives more information about each typical farm.

The majority of farms shown in the chart are only just covering their cash costs. During times of high feed prices, those purchasing cattle for yard finishing or feedlots often cope by not purchasing stock. Most of these farms indicate a lack of sustainability in the long term, as the beef returns are not covering their total costs. In other words, the returns from beef are not providing sufficient income to cover their non-cash fixed costs of family labour, return on owner-occupied land and depreciation.

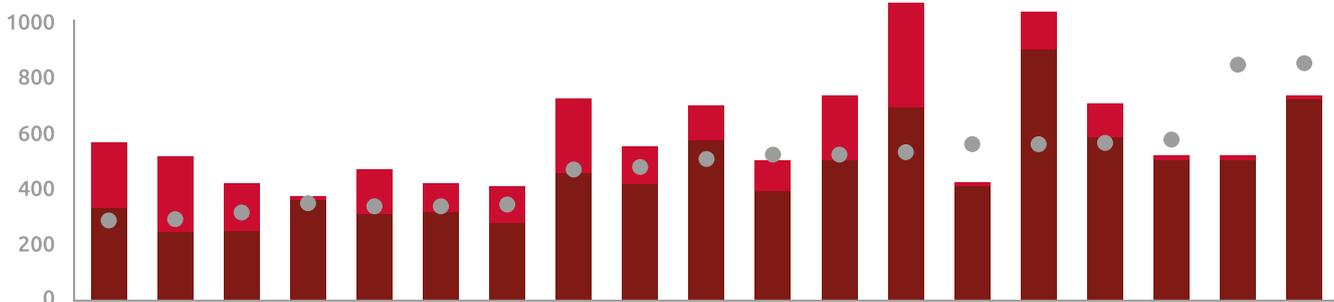
The chart is shown in ascending order of total beef enterprise returns because globally, farmers tend to have little control over their market price. Farmers worldwide have to manage their businesses by optimising output and managing costs within the price framework available to them.

Beef returns do not include any CAP payments received by European countries.

Chart 1: Beef finishing 2014 (USD per 100kg CW) in order of beef returns

**Hover country name with your mouse for explanations*

- Cash cost
- Non-cash fixed costs
- Beef returns



BEEF ENTERPRISES

BEEF STORES

Beef stores	Top third	Average	Bottom third
Number of herds in sample	11	35	11
Average head of output	68	50	33

Financial performance (£ per head output)	Top third	Average	Bottom third
Cattle output	1020.56	938.79	798.92
Other income	0.00	0.64	3.10
Gross output	1020.56	939.43	802.02
Purchase costs	632.77	625.92	520.27
Output less purchase costs	387.79	313.51	281.75

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	63.07	77.25	87.76
Home-grown feed	9.45	6.45	10.83
Purchased forage	25.46	11.64	2.53
Home-grown forage (excludes contract)	18.04	16.56	25.47
Total feed and forage	116.02	111.90	126.58
Vet and medicine	13.14	12.38	13.64
Bedding	33.05	31.59	30.47
Other livestock expenses	33.19	26.43	20.62
Total variable costs	195.40	182.30	191.31

Gross margin	192.39	131.20	90.44
---------------------	---------------	---------------	--------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	27.40	21.59	26.69
Machinery repairs and spares	8.25	12.28	21.28
Contracting	14.19	13.55	23.00
Electricity	0.76	1.43	2.25
Fuel	15.43	17.55	27.36
Property maintenance and water	13.12	15.78	16.33
Land rent (actual)	29.71	24.12	32.33
Overheads	25.36	30.27	33.97
Cash only fixed costs	134.23	136.56	183.21
Cash only cost of production	962.40	944.79	894.80
Cash only net margin	58.16	-5.36	-92.77

Depreciation	28.28	51.60	111.48
Finance costs (imputed)	21.86	20.27	27.59
Labour - unpaid (imputed)	23.34	40.41	85.46
Land rent (imputed)	2.58	9.85	23.41
Non-cash fixed costs	76.07	122.14	247.93
Full economic fixed costs	210.30	258.70	431.15
Full economic cost of production (inc purchase costs)	1038.47	1066.93	1142.73
Full economic net margin	-17.91	-127.50	-340.71



Physical performance	Top third	Average	Bottom third
Mortality %	1.4	1.1	1.6
Average age at start (days)	220	221	197
Average age at sale (days)	494	460	519
Feeding period (days)	273	238	321
Average liveweight at start (kg)	275	277	248
Average liveweight at sale (kg)	466	447	456
Daily liveweight gain (kg per day)	0.7	0.8	0.6
Purchase value per head (£)	624	620	514
Return per head finished (£)	1232	1074	771
Return per head store (£)	1000	928	802
Purchase price (£ per kg lwt)	2.28	2.22	2.00
Liveweight sale price all animals (£ per kg lwt)	2.19	2.11	1.78
Finished (%)	9	8	11
Store (%)	91	92	89
Output heifers (%)	50	47	45
Output steers (%)	50	47	48
Output bulls (%)	0	6	7
Total FW concentrate use (kg per head)	550	486	516
Total DM concentrate use (kg per head)	345	366	447
Average concentrate cost (£ per tonne)	155	180	188
Total FW forage (kg per head)	4072	3015	3285
Total DM forage (Kg per head)	1185	961	1206
Number of full grazing weeks	13	13	14
Stocking rate (LU per ha)	1.4	1.4	1.4
Inorganic nitrogen use (kg per ha)	44	46	42
Labour use - paid hours per head	2.5	2.1	2.7
Labour use - unpaid hours per head	2.5	4.1	8.4

BEEF ENTERPRISES

BEEF FINISHING

Beef finishing (up to 16 months of age, 16 to 24 months of age and over 24 months of age)	up to 16 mths average	16 to 24 mths average	over 24 mths average
Number of herds in sample	18	31	17
Average head of output	54	63	54

Financial performance (£ per head output)	up to 16 mths average	16 to 24 mths average	over 24 mths average
Cattle output	1134.73	1199.94	1215.82
Other income	0.00	11.16	3.86
Gross output	1134.73	1211.10	1219.68
Purchase costs	639.48	617.24	496.74
Output less purchase costs	495.25	593.86	722.93

Variable costs	up to 16 mths average	16 to 24 mths average	over 24 mths average
Purchased feed including minerals	219.64	148.08	88.74
Home-grown feed	54.88	90.32	60.65
Purchased forage	10.70	5.63	3.97
Home-grown forage (excludes contract)	18.86	39.45	94.98
Total feed and forage	304.08	283.48	248.34
Vet and medicine	13.93	15.91	14.53
Bedding	44.14	57.87	44.90
Other livestock expenses	28.88	38.78	49.17
Total variable costs	391.03	396.04	356.94

Gross margin	104.22	197.82	366.00
---------------------	---------------	---------------	---------------

Fixed costs	up to 16 mths average	16 to 24 mths average	over 24 mths average
Labour - paid	65.40	32.05	89.15
Machinery repairs and spares	14.92	18.56	23.36
Contracting	12.54	23.70	41.88
Electricity	2.21	3.20	3.99
Fuel	18.30	28.31	29.34
Property maintenance and water	28.55	23.09	30.51
Land rent (actual)	13.83	26.47	65.48
Overheads	41.83	44.01	41.87
Cash only fixed costs	197.58	199.39	325.57
Cash only cost of production	1228.09	1212.68	1179.25
Cash only net margin	-93.37	-1.58	40.43

Depreciation	50.50	82.21	93.49
Finance costs (imputed)	19.97	38.28	45.26
Labour - unpaid (imputed)	37.99	58.16	51.54
Land rent (imputed)	5.93	28.68	53.57
Non-cash fixed costs	114.40	207.33	243.87
Full economic fixed costs	311.98	406.72	569.44
Full economic cost of production (inc purchase costs)	1342.49	1420.01	1423.12
Full economic net margin	-207.76	-208.91	-203.44



Physical performance	up to 16 mths average	16 to 24 mths average	over 24 mths average
Mortality %	0.9	0.9	1.2
Average age at start (days)	217	213	189
Average age at sale (days)	431	623	761
Feeding period (days)	218	410	572
Average liveweight at start (kg)	295	279	223
Average liveweight at sale (kg)	586	605	609
Daily liveweight gain (kg per day)	1.4	0.8	0.7
Average carcass weight (kg)	325	330	331
Purchase value per head (£)	636	633	491
Return per head finished (£)	1152	1208	1228
Return per head store (£)	970	950	1117

Purchase price (£ per kg lwt)	2.16	2.50	2.26
Liveweight sale price all animals (£ per kg lwt)	1.96	1.99	2.03
Liveweight sale price: finished cattle (£ per kg lwt)	1.95	1.99	1.99
Deadweight sale price : finished cattle (£ per kg dwt)	3.59	3.69	3.73

Finished (%)	91	97	89
Store (%)	9	3	11
Output heifers (%)	39	38	34
Output steers (%)	17	45	65
Output bulls (%)	44	17	2

Total FW concentrate use (kg per head)	1545	1796	1077
Total DM concentrate use (kg per head)	1280	1151	737
Average concentrate cost (£ per tonne)	175	155	161
Total FW forage (kg per head)	2181	4614	5493
Total DM forage (Kg per head)	754	1686	2129

Number of full grazing weeks	5	18	30
Stocking rate (LU per ha)	2.0	1.7	1.4
Inorganic nitrogen use (kg per ha)	58	66	31

Labour use - paid hours per head	5.6	3.3	8.9
Labour use - unpaid hours per head	3.5	6.2	5.2

SHEEP ENTERPRISES

Sheep data is obtained from a range of farms with production years ending in the period April 2014 to March 2015. The top and bottom thirds are identified based on the full economic net margin. This means that all other financial and physical performance figures are for the farms in these datasets and are not the top and bottom third for each individual trait.

NON-SEVERELY DISADVANTAGED AREA (NON-SDA) BREEDING FLOCKS

Sheep flocks kept on any land defined as non-SDA by Defra. The grass areas can range from short and long-term leys to permanent pasture. The output from the flock is lambs sold finished, for breeding or as stores.

- Top third producers achieved positive full economic net margins
- Top third producers were often not the best physical performers for rearing percentage, but achieved higher carcass weights and lamb weight per forage hectare
- Top third producers had lower feed and forage costs
- Top third producers had lower fixed costs in all areas, particularly labour and depreciation.

SEVERELY DISADVANTAGED AREA (SDA) BREEDING FLOCKS

Sheep flocks kept on land classified as SDA by Defra. The output from the sheep flock is lambs sold finished, for breeding or as stores.

- On average, all producers achieved positive cash only net margins, with top third producers achieving positive full economic net margins
- For SDA flocks, gross output was key for top third producers due to higher rearing percentages and higher returns for both lambs sold finished and as stores
- Top third had a greater proportion of lambs sold finished
- While total variable costs for the top third were marginally higher than average, lower fixed costs, notably in depreciation and labour, added to an overall positive margin

NON-SDA FEBRUARY/MARCH LAMBING FLOCKS

Sheep flocks kept on land defined as non-SDA by Defra, where the majority of sheep lamb in February and/or March. The flocks tend to be housed prior to lambing.

- Top third achieved positive full economic net margins
- On average, all producers achieved positive cash only net margins
- Top third had higher stocking rates and produced higher lamb weight per forage hectare
- Top third produced higher rearing percentages

NON-SDA APRIL/MAY LAMBING FLOCKS

Sheep flocks kept on land defined as non-SDA by Defra, where the majority of sheep lamb in April and/or May.

- Top third achieved positive full economic net margins
- Average and top third producers achieved positive cash only net margins
- Top third had lower output due to lower rearing percentage but controlled their costs
- Top third feed and forage costs were significantly lower, with most of these savings coming from less purchased feed and reduced home-grown forage costs
- Top third feed less concentrate, graze for longer and utilise less artificial fertiliser
- Top third producers have lower fixed costs, in particular lower unpaid labour input

STORE LAMB FINISHING

Store lambs that have been retained and/or purchased, usually in the autumn, for further rearing to finish. Lambs may be grazed on grass or forage crops, at home or away-grazed.

- Both average and top third producers achieved positive full economic net margins
- Top third producers started with lighter and cheaper lambs and sold them lighter than average but for a higher price than average
- Despite a similar feeding period as the average, top third spent and fed less concentrates but spent more on purchased and home-grown forage
- Top third producers had lower fixed costs in all areas, particularly in labour.



SHEEP ENTERPRISES INTERNATIONAL COMPARISONS

These international comparisons are provided by the agri benchmark international comparison network. There are 15 country members of the breeding sheep group with 35 'typical' farms. Comparisons are based on an internationally standardised method of establishing and analysing typical virtual farms that represent production systems and their profitability in each country. The results are shown in US Dollars (USD) as an international comparison base. For more information visit www.agribenchmark.org

The UK trades and competes in a global market and is therefore affected by exchange rates as well as any competitive cost of production. The countries in the chart have been chosen to represent the UK's main competitors and exporting environment for commercial lamb. The numbers next to each country name indicate the number of ewes put to the ram each year. When viewing as a pdf, hovering over the name on the bottom axis of the chart gives more information about each typical farm.

The chart is shown in ascending order of total sheep returns (lamb sales, cull sales and wool) because globally, farmers tend to have little control over their market price. Farmers worldwide have to manage their businesses by optimising

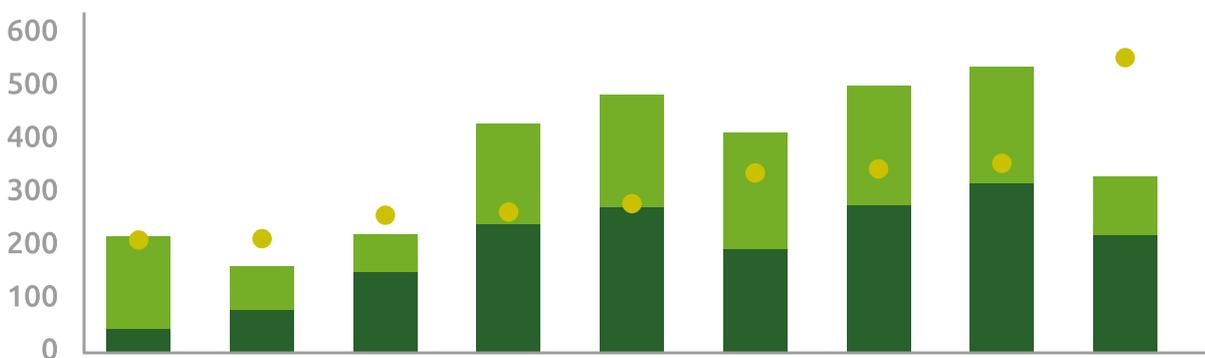
output and managing costs within the price framework available to them.

The farms shown in the chart are covering their cash costs and are sustainable in the short term. However, many of these farms indicate a lack of sustainability in the long term, as the returns from breeding sheep are not covering their total costs. In other words, returns from breeding sheep are not providing sufficient income to cover the farm's non-cash fixed costs of family labour, return on owner-occupied land and depreciation.

Sheep returns do not include any CAP payments received by European countries.

*Chart 1: Breeding sheep 2014 (USD per 100kg lwt) in order of flock returns
Hover country name with your mouse for explanations

- Cash cost
- Non-cash fixed costs
- Total returns



NON-SDA BREEDING FLOCKS

Non-SDA breeding flocks	Top third	Average	Bottom third
Number of flocks in sample	26	80	26
Average flock size	759	551	401

Financial performance (£ per ewe to ram)	Top third	Average	Bottom third
Lamb output	101.71	101.84	100.35
Other income	2.33	2.27	2.39
Gross output	104.04	104.12	102.73
Replacement costs	10.97	11.43	12.57
Output less replacement costs	93.06	92.69	90.17

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	8.11	10.91	12.35
Home-grown feed	0.65	0.81	1.29
Purchased forage	1.39	1.03	0.39
Home-grown forage (excludes contract)	4.00	5.02	8.26
Total feed and forage	14.15	17.76	22.29
Vet and medicine	6.37	6.61	7.12
Bedding	1.26	1.34	2.22
Other livestock expenses	5.16	6.46	8.53
Total variable costs	26.93	32.17	40.17

Gross margin	66.13	60.51	50.00
---------------------	--------------	--------------	--------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	8.77	10.18	12.59
Machinery repairs and spares	1.21	2.20	3.93
Contracting	2.27	3.23	5.80
Electricity	0.24	0.25	0.40
Fuel	2.62	3.45	4.83
Property maintenance and water	1.60	1.97	2.12
Land rent (actual)	6.53	7.59	9.64
Overheads	3.48	4.07	4.16
Cash only fixed costs	26.72	32.95	43.47
Cash only cost of production	64.63	76.56	96.20
Cash only net margin	39.41	27.56	6.53

Depreciation	5.58	7.31	9.98
Finance costs (imputed)	0.82	1.17	1.70
Labour - unpaid (imputed)	12.20	18.11	32.49
Land rent (imputed)	6.27	8.56	9.64
Non-cash fixed costs	24.88	35.15	53.81
Full economic fixed costs	51.60	68.11	97.28
Full economic cost of production	89.51	111.71	150.01
Full economic net margin	14.53	-7.59	-47.28



Physical performance	Top third	Average	Bottom third
Ewe to ram ratio	51	47	43
Scanning percentage per ewe scanned (%)	171	176	173
Lambs born alive per 100 ewes to ram	150	154	162
Lambs born dead per 100 ewes to ram	9	9	9
Lambs died in first 48 hours per 100 ewes to ram	7	7	9
Lambs died after 48 hours per 100 ewes to ram	4	5	7
Lambs reared per 100 ewes to ram	141	143	146
Lamb losses from birth to rearing (% of born alive)	6	7	10
Empty ewes (%)	7.2	5.8	4.7
Ewe mortality (%)	3.4	3.5	3.7
Flock replacement rate (%)	24.3	22.7	20.1

Average age at weaning (days)	113	117	115
Average weight at weaning (kg)	31.3	32.6	32.5
Average liveweight per reared lamb (all lambs) (kg per lamb)	39.0	38.7	38.6
Average liveweight (kg lwt per lamb sold finished)	42.2	41.6	42.0
Average carcase weight (kg dwt per lamb sold finished)	19.9	19.5	19.6
Average store weight (kg lwt per lamb sold store)	32.2	33.1	31.2
Average age at sale (days)	155	152	153
Daily liveweight gain to sale (kg per day)	0.24	0.24	0.24
Lamb weight produced per forage hectare (kg)	528	480	450

Return per lamb sold finished (£)	77.38	76.95	75.18
Return per lamb sold store (£)	54.53	55.03	54.16

Reared lambs sold finished (%)	43	48	49
Reared lambs sold store (%)	5	7	10
Reared lambs sold breeding (%)	6	4	4
Reared lambs valued at end (%)	46	41	37

Total FW ewe concentrate use (kg per ewe)	31	34	38
Total DM ewe concentrate use (kg per ewe)	23	28	32
Average ewe concentrate cost (£ per tonne)	222	231	240
Total FW forage (kg per ewe)	222	356	410
Total DM forage (kg per ewe)	61	80	117
Creep feed per lamb reared (kg per lamb)	6	9	9

Number of full grazing weeks	48	47	45
Stocking rate (LU per ha)	1.1	1.0	0.9
Inorganic nitrogen use (kg per ha)	27	29	38

Labour use - paid hours per ewe	0.9	1.0	1.2
Labour use - unpaid hours per ewe	1.2	1.8	3.2

SDA BREEDING FLOCKS

SDA breeding flocks	Top third	Average	Bottom third
Number of flocks in sample	15	47	15
Average flock size	837	598	256

Financial performance (£ per ewe to ram)	Top third	Average	Bottom third
Lamb output	115.55	98.68	81.16
Other income	2.33	2.18	2.19
Gross output	117.88	100.86	83.35
Replacement costs	14.87	15.14	17.75
Output less replacement costs	103.01	85.73	65.60

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	6.96	7.82	16.72
Home-grown feed	0.00	0.23	1.09
Purchased forage	0.09	0.25	0.23
Home-grown forage (excludes contract)	8.15	5.97	3.77
Total feed and forage	15.20	14.27	21.81
Vet and medicine	6.59	7.29	9.95
Bedding	0.69	0.57	0.73
Other livestock expenses	5.61	5.38	5.55
Total variable costs	28.10	27.51	38.04

Gross margin	74.91	58.22	27.56
---------------------	--------------	--------------	--------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	7.43	8.93	4.22
Machinery repairs and spares	2.52	2.45	2.60
Contracting	2.70	2.37	2.40
Electricity	0.10	0.11	0.10
Fuel	3.57	3.26	4.14
Property maintenance and water	1.12	1.35	1.94
Land rent (actual)	2.58	5.53	6.64
Overheads	2.91	3.46	4.17
Cash only fixed costs	22.92	27.45	26.20
Cash only cost of production	65.89	70.09	81.99
Cash only net margin	51.99	30.77	1.36

Depreciation	4.89	6.27	10.00
Finance costs (imputed)	0.84	1.29	2.08
Labour - unpaid (imputed)	15.32	19.17	39.92
Land rent (imputed)	7.35	5.99	3.13
Non-cash fixed costs	28.41	32.72	55.12
Full economic fixed costs	51.33	60.17	81.33
Full economic cost of production	94.29	102.81	137.11
Full economic net margin	23.59	-1.95	-53.76



Physical performance	Top third	Average	Bottom third
Ewe to ram ratio	50	45	38
Scanning percentage per ewe scanned (%)	179	165	143
Lambs born alive per 100 ewes to ram	163	150	129
Lambs born dead per 100 ewes to ram	7	7	8
Lambs died in first 48 hours per 100 ewes to ram	9	9	9
Lambs died after 48 hours per 100 ewes to ram	3	4	6
Lambs reared per 100 ewes to ram	155	140	117
Lamb losses from birth to rearing (% of born alive)	5	7	9
Empty ewes (%)	3.1	4.8	7.7
Ewe mortality (%)	3.1	3.6	5.3
Flock replacement rate (%)	21.7	25.8	31.5

Average age at weaning (days)	118	121	126
Average weight at weaning (kg)	28.7	29.9	31.1
Average liveweight per reared lamb (all lambs) (kg per lamb)	39.4	37.9	37.7
Average liveweight (kg lwt per lamb sold finished)	42.1	41.7	38.4
Average carcass weight (kg dwt per lamb sold finished)	19.8	19.6	18.0
Average store weight (kg lwt per lamb sold store)	36.5	34.0	39.0
Average age at sale (days)	186	180	165
Daily liveweight gain to sale (kg per day)	0.21	0.21	0.23
Lamb weight produced per forage hectare (kg)	694	484	313

Return per lamb sold finished (£)	74.54	72.58	67.28
Return per lamb sold store (£)	68.51	57.10	54.42

Reared lambs sold finished (%)	57	43	47
Reared lambs sold store (%)	2	10	8
Reared lambs sold breeding (%)	5	6	4
Reared lambs valued at end (%)	36	41	42

Total FW ewe concentrate use (kg per ewe)	24	27	59
Total DM ewe concentrate use (kg per ewe)	20	23	47
Average ewe concentrate cost (£ per tonne)	257	244	239
Total FW forage (kg per ewe)	151	139	157
Total DM forage (kg per ewe)	53	55	98
Creep feed per lamb reared (kg per lamb)	1	3	18

Number of full grazing weeks	49	49	49
Stocking rate (LU per ha)	1.4	1.1	0.8
Inorganic nitrogen use (kg per ha)	33	25	14

Labour use - paid hours per ewe	0.8	0.9	0.6
Labour use - unpaid hours per ewe	1.6	1.9	3.9

NON-SDA FEBRUARY/MARCH LAMBING FLOCKS

Feb/March lambing breeding flocks	Top third	Average	Bottom third
Number of flocks in sample	14	44	14
Average flock size	685	538	390

Financial performance (£ per ewe to ram)	Top third	Average	Bottom third
Lamb output	118.13	112.01	104.78
Other income	2.37	2.46	2.57
Gross output	120.51	114.47	107.35
Replacement costs	8.47	11.80	13.21
Output less replacement costs	112.04	102.68	94.14

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	11.26	13.63	15.80
Home-grown feed	1.29	1.28	1.98
Purchased forage	0.44	0.75	0.64
Home-grown forage (excludes contract)	5.87	5.76	9.26
Total feed and forage	18.86	21.41	27.67
Vet and medicine	8.01	7.96	8.43
Bedding	1.98	1.94	3.52
Other livestock expenses	5.83	7.02	8.12
Total variable costs	34.69	38.32	47.75

Gross margin	77.35	64.35	46.40
---------------------	--------------	--------------	--------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	11.01	10.91	7.56
Machinery repairs and spares	1.20	1.89	3.00
Contracting	2.05	2.67	3.94
Electricity	0.35	0.36	0.46
Fuel	2.66	3.51	5.04
Property maintenance and water	2.01	2.02	2.09
Land Rent (actual)	5.44	6.97	9.09
Overheads	3.78	4.28	3.79
Cash only fixed costs	28.50	32.61	34.98
Cash only cost of production	71.65	82.73	95.94
Cash only net margin	48.85	31.74	11.41

Depreciation	7.37	8.78	13.83
Finance costs (Imputed)	0.99	1.41	2.11
Labour - unpaid (Imputed)	11.76	18.18	37.70
Land Rent (Imputed)	8.52	8.19	9.09
Non-cash fixed costs	28.64	36.55	62.73
Full economic fixed costs	57.14	69.16	97.71
Full economic cost of production	100.29	119.28	158.67
Full economic net margin	20.21	-4.81	-51.32



Physical performance	Top third	Average	Bottom third
Ewe to ram ratio	47	43	42
Scanning percentage per ewe scanned (%)	186	184	175
Lambs born alive per 100 ewes to ram	166	161	163
Lambs born dead per 100 ewes to ram	7	8	9
Lambs died in first 48 hours per 100 ewes to ram	5	6	8
Lambs died after 48 hours per 100 ewes to ram	4	5	9
Lambs reared per 100 ewes to ram	159	151	146
Lamb losses from birth to rearing (% of born alive)	4	7	10
Empty ewes (%)	4.4	5.1	5.1
Ewe mortality (%)	3.0	3.6	3.8
Flock replacement rate (%)	21.4	23.9	22.8

Average age at weaning (days)	116	119	116
Average weight at weaning (kg)	33.5	33.8	32.8
Average liveweight per reared lamb (all lambs) (kg per lamb)	39.9	39.6	39.5
Average liveweight (kg lwt per lamb sold finished)	42.5	41.5	41.1
Average carcass weight (kg dwt per lamb sold finished)	20.0	19.5	19.2
Average store weight (kg lwt per lamb sold store)	33.6	35.2	29.8
Average age at sale (days)	157	152	152
Daily liveweight gain to sale (kg per day)	0.25	0.25	0.25
Lamb weight produced per forage hectare (kg)	604	519	491

Return per lamb sold finished (£)	78.74	77.51	73.70
Return per lamb sold store (£)	45.73	53.23	62.91

Reared lambs sold finished (%)	56	58	60
Reared lambs sold store (%)	1	3	2
Reared lambs sold breeding (%)	10	6	5
Reared lambs valued at end (%)	33	32	33

Total FW ewe concentrate use (kg per ewe)	47	48	51
Total DM ewe concentrate use (kg per ewe)	36	39	45
Average ewe concentrate cost (£ per tonne)	204	217	224
Total FW forage (kg per ewe)	156	294	427
Total DM forage (kg per ewe)	61	75	120
Creep feed per lamb reared (kg per lamb)	10	11	13

Number of full grazing weeks	46	45	44
Stocking rate (LU per ha)	1.2	1.1	1.0
Inorganic nitrogen use (kg per ha)	44	36	43

Labour use - paid hours per ewe	1.2	1.1	0.9
Labour use - unpaid hours per ewe	1.2	1.8	3.8

NON-SDA APRIL/MAY LAMBING FLOCKS

April/May lambing breeding flocks	Top third	Average	Bottom third
Number of flocks in sample	11	33	11
Average flock size	856	590	338

Financial performance (£ per ewe to ram)	Top third	Average	Bottom third
Lamb output	80.04	88.78	104.60
Other income	2.36	2.02	2.54
Gross output	82.40	90.80	107.13
Replacement costs	10.71	11.21	14.04
Output less replacement costs	71.68	79.59	93.09

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	3.09	7.20	11.51
Home-grown feed	0.19	0.27	0.84
Purchased forage	2.34	1.36	0.06
Home-grown forage (excludes contract)	1.97	4.23	7.35
Total feed and forage	7.60	13.07	19.76
Vet and medicine	3.84	4.98	6.36
Bedding	0.24	0.59	1.53
Other livestock expenses	4.03	5.84	9.41
Total variable costs	15.71	24.49	37.06

Gross margin	55.98	55.10	56.03
---------------------	--------------	--------------	--------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	9.44	9.65	23.80
Machinery repairs and spares	1.49	2.41	3.55
Contracting	2.99	3.88	8.51
Electricity	0.06	0.12	0.42
Fuel	2.87	3.35	4.62
Property maintenance and water	1.65	1.88	2.01
Land rent (actual)	9.76	8.05	9.19
Overheads	2.94	3.84	4.65
Cash only fixed costs	31.22	33.20	56.75
Cash only cost of production	57.64	68.90	107.85
Cash only net margin	24.76	21.90	-0.72

Depreciation	3.49	5.53	8.77
Finance costs (imputed)	0.50	0.89	1.78
Labour - unpaid (imputed)	8.48	17.36	26.15
Land rent (imputed)	5.49	9.08	9.19
Non-cash fixed costs	17.96	32.85	45.89
Full economic fixed costs	49.18	66.05	102.64
Full economic cost of production	75.60	101.75	153.74
Full economic net margin	6.80	-10.95	-46.61



Physical performance	Top third	Average	Bottom third
Ewe to ram ratio	54	51	39
Scanning percentage per ewe scanned (%)	154	167	170
Lambs born alive per 100 ewes to ram	133	146	161
Lambs born dead per 100 ewes to ram	10	9	10
Lambs died in first 48 hours per 100 ewes to ram	8	8	7
Lambs died after 48 hours per 100 ewes to ram	3	4	5
Lambs reared per 100 ewes to ram	122	135	149
Lamb losses from birth to rearing (% of born alive)	8	8	7
Empty ewes (%)	8.8	6.6	4.5
Ewe mortality (%)	3.3	3.3	4.3
Flock replacement rate (%)	22.6	21.5	17.8

Average age at weaning (days)	114	114	119
Average weight at weaning (kg)	29.5	30.9	33.1
Average liveweight per reared lamb (all lambs) (kg per lamb)	36.6	37.3	39.0
Average liveweight (kg lwt per lamb sold finished)	40.3	41.5	43.4
Average carcass weight (kg dwt per lamb sold finished)	19.0	19.4	20.3
Average store weight (kg lwt per lamb sold store)	32.4	32.2	31.6
Average age at sale (days)	152	153	156
Daily liveweight gain to sale (kg per day)	0.22	0.23	0.23
Lamb weight produced per forage hectare (kg)	423	432	389

Return per lamb sold finished (£)	80.09	74.89	79.08
Return per lamb sold store (£)	54.91	55.09	52.99

Reared lambs sold finished (%)	22	34	50
Reared lambs sold store (%)	10	12	21
Reared lambs sold breeding (%)	1	2	3
Reared lambs valued at end (%)	66	53	26

Total FW ewe concentrate use (kg per ewe)	8	18	32
Total DM ewe concentrate use (kg per ewe)	6	14	28
Average ewe concentrate cost (£ per tonne)	316	271	268
Total FW forage (kg per ewe)	336	424	492
Total DM forage (kg per ewe)	69	85	152
Creep feed per lamb reared (kg per lamb)	1	6	6

Number of full grazing weeks	51	48	46
Stocking rate (LU per ha)	1.0	0.9	0.8
Inorganic nitrogen use (kg per ha)	7	23	33

Labour use - paid hours per ewe	0.9	0.9	2.0
Labour use - unpaid hours per ewe	0.8	1.7	2.5

STORE LAMB FINISHING

Store lamb finishing	Top third	Average	Bottom third
Number of flocks in sample	16	49	16
Average head of output	872	589	399

Financial performance (£ per head output)	Top third	Average	Bottom third
Lamb output	82.80	79.78	77.03
Other income	0.02	0.06	0.00
Gross output	82.83	79.84	77.03
Purchase costs	53.64	56.72	59.70
Output less purchase costs	29.18	23.12	17.33

Variable costs	Top third	Average	Bottom third
Purchased feed including minerals	0.87	1.40	2.91
Home-grown feed	0.62	0.75	1.99
Purchased forage	1.02	0.51	0.04
Home-grown forage (excludes contract)	2.50	1.80	1.46
Total feed and forage	5.01	4.46	6.41
Vet and medicine	0.81	1.12	2.15
Bedding	0.11	0.12	0.19
Other livestock expenses	2.87	2.93	3.16
Total variable costs	8.80	8.63	11.90

Gross margin	20.38	14.49	5.43
---------------------	--------------	--------------	-------------

Fixed costs	Top third	Average	Bottom third
Labour - paid	1.31	1.80	1.21
Machinery repairs and spares	0.19	0.46	0.91
Contracting	0.25	0.54	1.16
Electricity	0.01	0.03	0.07
Fuel	0.47	0.62	1.08
Property maintenance and water	0.76	1.01	1.47
Land rent (actual)	0.59	1.09	1.47
Overheads	2.49	2.89	3.91
Cash only fixed costs	6.08	8.44	11.28
Cash only cost of production (inc purchase costs)	68.52	73.79	82.88
Cash only net margin	14.30	6.05	-5.85

Depreciation	1.09	1.56	2.38
Finance costs (imputed)	0.69	0.70	0.76
Labour - unpaid (imputed)	2.01	2.43	4.12
Land rent (imputed)	0.73	0.93	1.73
Non-cash fixed costs	4.53	5.62	8.98
Full economic fixed costs	10.61	14.06	20.26
Full economic cost of production	73.05	79.41	91.86
Full economic net margin	9.77	0.43	-14.83



Physical performance	Top third	Average	Bottom third
Mortality (%)	1.2	1.6	2.7
Feeding period (days)	102	101	108
Average liveweight at start (kg)	32.2	33.4	34.4
Average liveweight at sale (kg)	42.8	43.3	42.6
Daily liveweight gain (kg per day)	0.12	0.10	0.08
Average carcase weight (kg)	20.0	20.4	20.4
Purchase value per lamb (£)	52.99	55.83	58.15
Return per lamb (£)	82.80	79.78	77.03
Liveweight price all lambs (£ per kg lwt)	1.94	1.85	1.80
Return per kg deadweight: finished lambs (£ per kg dwt)	4.14	3.96	3.97
Lambs sold finished (%)	100	96	85
Lambs sold or retained breeding (%)	0	4	15
Total FW concentrate use (kg per lamb)	8	11	26
Average concentrate cost (£ per tonne)	192	190	187
Inorganic nitrogen use (kg per ha)	28	27	24
Labour use - paid hours per lamb	0.1	0.2	0.1
Labour use - unpaid hours per lamb	0.2	0.2	0.4

HOW THE STOCKTAKE DATA IS COMPILED

All the data relates to enterprises with production cycles ending during the year to 31 March 2015. Breeding enterprises will usually reflect autumn to autumn. The averages shown are for the whole enterprise sample and weighted by weighting individual enterprise information in the base data by the number of relevant animals in the enterprise.

What the Stocktake figures mean:

AVERAGE HERD/FLOCK SIZE

This is the average number of females put to the bull/ram for this production year. In the case of beef and store enterprises, this is the output number.

GROSS OUTPUT

The output includes sales and transfers to other farm enterprises, including any on-farm consumption. Other income can include, for example; wool, value of manure transferred to an arable enterprise and compensation receipts.

GROSS MARGIN

Equates to the value of gross output minus purchase or replacement costs and the variable costs applicable to the enterprise.

CASH ONLY NET MARGIN

Equates to the gross margin less cash only fixed costs.

FULL ECONOMIC NET MARGIN

Equates to the cash only net margin less non-cash fixed costs. These include depreciation, the value of family labour, imputed rental cost of owner-occupied land and imputed interest on working capital.

Results have been ranked into bottom and top third on the basis of full economic net margin per head of output in the case of beef and store lamb enterprises, and on the basis of per ewe or cow put to the ram or bull in the case of breeding enterprises.

Variable costs are defined as follows:

PURCHASED FEED INCLUDING MINERALS

Due to the amount of alternative feeds (eg by-products, wet feeds) that can be fed to livestock, these feeds are converted to a concentrate equivalent (88% DM) to arrive at a true concentrate feed rate. The concentrate cost per tonne is calculated for an 88% DM feed equivalent.

HOME-GROWN FEED

Home-grown concentrates (eg barley) are costed to the enterprise at market value.

HOME-GROWN FORAGE VARIABLE COSTS

Includes fertiliser, seed, spray and sundry (eg silage wrap) costs allocated depending on the amount of home-grown forage consumed by the enterprise. It includes away-grazing costs, but excludes any forage contractor charges.

BEDDING

Actual cost of any purchased bedding and the market value of any home-grown bedding used.

OTHER LIVESTOCK EXPENSES

Including any direct contract charges such as foot trimming, shearing, and pregnancy scanning. It also includes any artificial insemination and breeding costs.

Cash only fixed costs are defined as follows:

LABOUR COSTS (PAID)

Regular full-time/part-time wages and casual wages for paid labour. In addition to actual wages, employer's liability insurance and employer National Insurance contributions are also included.

MACHINERY REPAIRS AND SPARES

Machinery repairs, spares, machinery insurance, road tax and MOT where applicable.

CONTRACTING

Contract labour and machinery hire for forage harvesting, hedge-cutting, manure carting, etc.

PROPERTY MAINTENANCE AND WATER

Water, farm building maintenance (excluding farmhouse) and property repairs.

LAND RENT (ACTUAL)

Actual rent for rented land.

OVERHEADS

General farm insurance, office costs (including fees for professional services) and miscellaneous sundries.

Non-cash only fixed costs are defined as follows:

DEPRECIATION

Machinery and fixtures depreciation, including enterprise-specific equipment and forage machinery calculated on replacement cost, based on the current value of machinery and equipment on farm. It is not the historic cost used in financial accounts.

IMPUTED FINANCE COSTS

Interest on working capital is calculated for costs incurred during the production cycle of the beef or sheep enterprise.

LABOUR COSTS

The value of unpaid family labour (full time, part time or casual). Unpaid family labour is the value of family labour that is not paid directly from farm accounts.

LAND RENT (IMPUTED)

A rental value for owner-occupied land is imputed. The rental used is based on local/regional land rental values.

Physical performance:

The calculated, weighted average will not include any zero return where data is not available or not recorded on an individual farm (eg lambs born dead).

SCANNING PERCENTAGE

This is the scanning percentage only of the females that have been scanned in any enterprise and may not be representative of all the females in the flock/herd. Therefore, the average has not been weighted for flock/herd size.

LAMBING/CALVING/REARING/MORTALITY RATES

The number of animals born/reared/died per breeding animal put to the ram/bull. Lamb and calf deaths after live birth are also expressed as a percentage of animals born alive.

CALVING PERIOD AND PERCENTAGE BORN IN FIRST THREE WEEKS

Calving period is the number of weeks between the first and last calf born. Where a suckler herd has deliberately separate calving blocks (ie by removing the bull to result in different calving blocks), the calving period is a weighted average of the blocks. In these instances, the percentage born in the first three weeks is also a weighted average of the blocks.

DAILY LIVELINEWEIGHT GAIN

Calculated by taking the difference between the starting and finishing weights of the animals and dividing by the number of days in the enterprise.

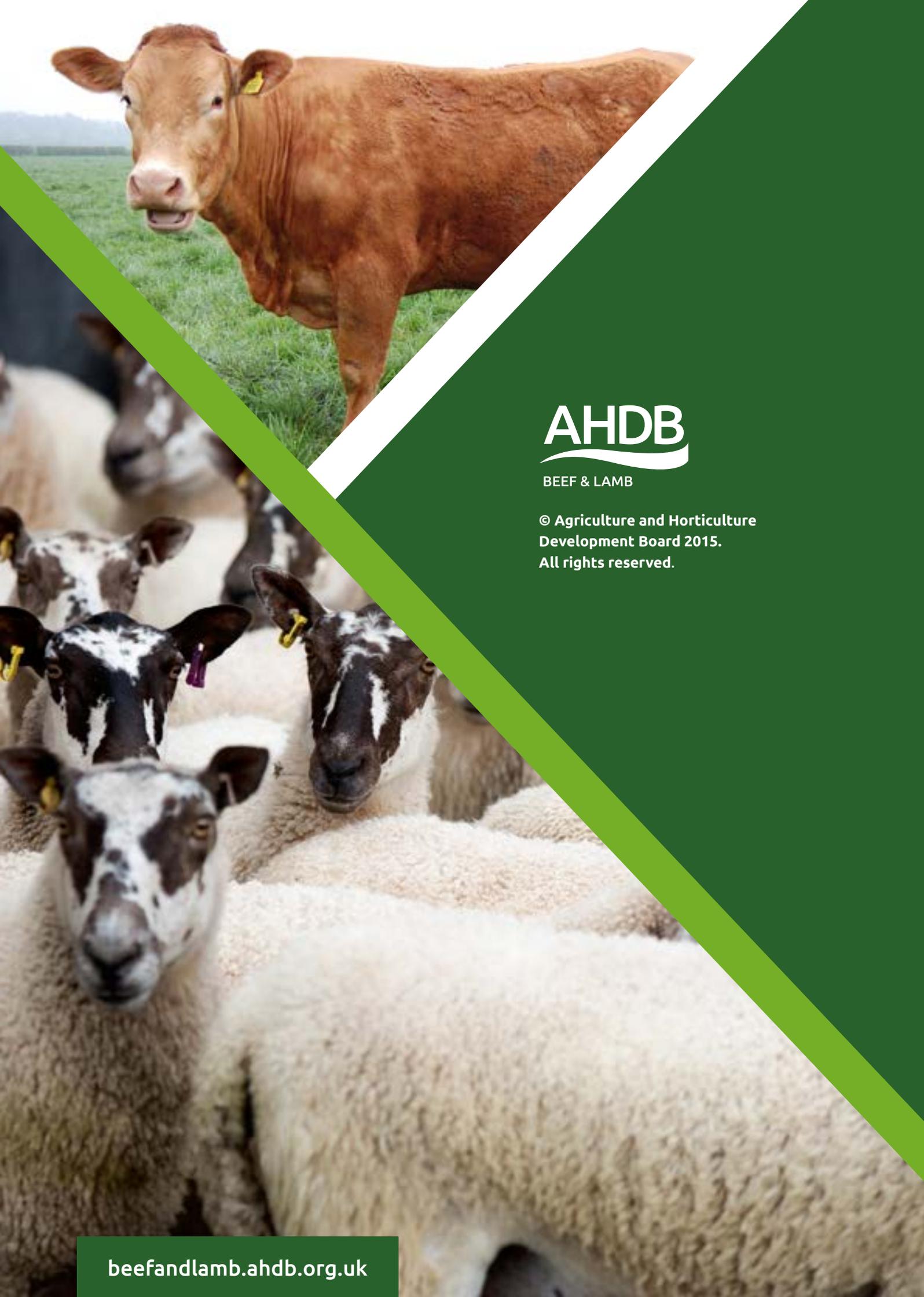
STOCKING RATES

The calculation is based on the number of livestock units per forage hectare used by the enterprise, including forage hectares required to produce the home-grown forage fed to the enterprise (eg home-grown silage). It does not include any area of away grazing or area required to grow concentrates (purchased or home-grown) or purchased forage.

Areas of rough grazing are adjusted for quality.

WEIGHT PRODUCED PER FORAGE HECTARE

The total liveweight kilogrammes produced per forage hectare allocated to the enterprise. In the case of lambs, this will be the total liveweight kilogrammes reared during the production cycle (tupping to tupping). In the case of suckled calves, this will be the total liveweight kilogrammes weaned and adjusted to a common 200-day weaning age.



AHDB

BEEF & LAMB

© Agriculture and Horticulture
Development Board 2015.
All rights reserved.

beefandlamb.ahdb.org.uk