# **StocktakeReport**

This document involves costings for English cattle and sheep enterprises in the year ending 31 March 2014

# Stocktake.

# Glossary of abbreviations

DA - Disadvantaged Area DLWG – Daily Liveweight Gain DM - Dry Matter Dwt - Deadweight Ha - Hectare Kg – Kilogrammes LFA – Less Favoured Area FW - Fresh Weight LU - Livestock Unit \_\_\_\_\_ Lwt - Liveweight

SDA - Severely Disadvantaged Area

# Stocktake.

While the Agriculture and Horticulture Development Board, operating through its EBLEX division, 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.

# Contents

Welcome	4
Lowland Suckler Herds	6
Less Favoured Area Suckler Herds	10
Disadvantaged Area/Severely Disadvantaged Area Suckler Herds	14
Spring Calving Lowland Suckler Herds	18
Autumn Calving Disadvantaged Area and Lowland Suckler Herds	22
Combined Breeding/Finishing Herds	26
Combined Breeding/Store Rearing Herds	30
Beef Finishing (up to 16 months of age)	34
Beef Finishing (over 16 months of age)	38
Beef Stores	42
Lowland Breeding Flocks	46
Less Favoured Area Breeding Flocks	50
Disadvantaged Area/Severely Disadvantaged Area Breeding Flocks	54
Lowland February/March Lambing Breeding Flocks	58
Lowland April/May Lambing Breeding Flocks	62
Store Lamb Finishing	66
How the Stocktake data is compiled	71

# Optimising output and managing costs key to coping with volatility



Welcome to the Stocktake Report 2014, a reference document for the English beef and sheep meat industry against which producers can benchmark their own performance and enterprise costs.

This is the second year that EBLEX has collected the data through its in-house team. This system obtains a wide variety of on-farm data from a range of farms and enterprises with

production years ending in the period between April 2013 and March 2014.

This report presents the information for different beef and sheep enterprises in a familiar format to previous years, so that it is easy to follow, but with some new refinements. As well as some additional physical performance measures, this year we give further analysis based on calving (spring and autumn) and lambing (February/March and April/May) periods to illustrate the performance of some common management systems. We have also expanded the combined suckler cow analysis to cover those farms mainly selling their suckled calves finished or mainly selling their calves as yearling stores.

In addition to the report itself, a range of online Stocktake tools are being developed which will be available via www.eblex.org.uk. These will enable producers to examine in further detail how certain changes will impact the bottom line of their enterprise.

English beef and sheep producers continue to work within an environment that is influenced by a huge range of factors, some of which, like the weather, we have no control over. However, we are able to significantly influence most factors that affect the bottom line, notably physical performance and costs. While global factors have an effect on prices, for a number of enterprises there are seasonal variations that affect our marketing patterns and management decisions. Ensuring that we perform at optimal levels should ensure that businesses are best able to cope with areas of volatility.



We also need to review our enterprises within the changing environment of Common Agricultural Policy (CAP) reform and our individual farms' strengths and weaknesses. This document is designed to help inform that process.

Returns for the average-performing enterprises have varied during the report period, with some margins improving and others declining further. While there are examples of positive margins in all sheep systems, suckler cow enterprises struggle to be fully rewarded for the cost of producing a suckled calf to weaning. The top third beef store and finishing enterprises achieve positive margins. The top third combined suckler cow and finishing or store enterprises still produce a negative margin, further illustrating that farms breeding a beef suckled calf are not fully recouping the additional cost of producing a beef animal over the cost of a dairy-bred calf.

A key driver continues to be fixed costs, with total fixed costs for top third enterprises consistently lower than the average total fixed costs across all systems.

It is important to note that 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 farm businesses viable when beef and sheep enterprises are producing negative margins, including Single Payment Scheme payments, Environmental Stewardship payments, diversification and other farm income.

We hope you find this Stocktake report useful. We would welcome your feedback via www.eblex.org.uk, where you can also access a range of free information to help improve efficiency in the areas you have identified for improvement.

John Cross EBLEX Chairman

Suckler cow enterprises kept on land defined as non-Less Favoured Area (LFA) 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.

## Lowland Suckler Herds

- Average and top third net margins declined compared with last year even though variable costs were lower, mainly due to higher fixed costs and lower output
- Top third herds had more heifers calving at two years of age, greater use of creep feed and higher weaned calf weight produced per forage hectare, due to higher weaning weights at 200 days and higher stocking rates
- Total feed and forage costs for the top third were slightly higher than the average, although forage fed per cow was lower
- Top third replacement costs were lower than the average although both were significantly higher than the previous year
- Lower fixed costs accounted for approximately two-thirds of the difference in net margin between the average and the top third with labour, land rent and depreciation the largest contributors

Financial performance (£ per cow to bull)

	Average	Top Third
Number of herds in sample	87	29
Average herd size (cows to bull)	90	112
Calf output	509.42	539.69
Other income	2.00	3.08
Gross Output	<b>511.42</b>	542.77
Replacement costs Output less replacement costs	66.08 <b>445.34</b>	46.63 <b>496.14</b>
Variable Costs	10.05	47 / 7
Purchased feed including minerals Home-grown feed	40.05 9.77	47.67 6.56
Purchased forage	12.45	17.76
Home-grown forage variable costs	53.05	47.15
Total feed and forage	115.31	119.13
Vet and medicine	30.00	28.12
Bedding	31.61	21.21
Other livestock expenses	17.56	17.84
Total variable costs	194.48	186.31
Gross Margin	250.86	309.83
Fixed Costs		
Labour – paid	83.20	71.30
Labour – unpaid	78.32	49.62
Machinery repairs and spares	23.89 38.26	14.28 37.35
Contracting Electricity	30.20	1.26
Fuel	31.11	23.45
Property maintenance and water	19.74	19.60
Depreciation	75.72	46.97
Land rent (imputed and actual)	125.70	95.67
Imputed finance costs	41.18	36.38
Overheads	18.70	16.14
Total fixed costs	538.97	412.02
Net Margin (including imputed costs)	-288.11	-102.19

## **Physical performance**

Cow to bull ratio Age at first calving	Average 30	<b>Top Third</b> 30
Herds 2 year policy (%)	49	55
Herds 2.5 year policy (%)	37	41
Herds more than 2.5 year policy (%)	14	4
Percentage of cows/heifers scanned in-calf (%) Calves born alive per 100 cows/heifers to bull Calves born dead per 100 cows/heifers to bull Calves died from birth to weaning per 100 cows/heifers to bull Calves weaned per 100 cows/heifers to bull* Calf losses from birth to weaning (% of born alive) Calving period (first to last calf - weeks) Cows and heifers calving in first 3 weeks (%) Empty cows/heifers (%) Cow mortality (%) Herd replacement rate (%)	91 87 4 84 4 18.0 30.7 9.3 2.3 16.7	93 88 4 3 84 4 17.8 27.5 8.9 1.7 17.0
Average age at weaning (days)	224	224
Average weight at weaning (kg per head)	288	305
Daily liveweight gain to weaning (kg per day)	1.1	1.2
Weaned calf weight produced per forage hectare (kg at 200 day	ys) 241	300
Return per calf (£ per head)	608	640
Calf price (£ per kg lwt)	2.12	2.10
Weaned calves sold at weaning (%)	7	3
Weaned calves retained at weaning (%)	93	97
Total FW cow concentrate use (kg per cow)	214	219
Total DM cow concentrate use (kg per cow)	127	157
Average concentrate cost (£ per tonne)	175	171
Total FW forage (kg per cow)	4200	3589
Total DM forage (kg per cow)	1568	1300
Creep feed fed (kg per calf weaned)	45	64
Number of grazing weeks	32	33
Stocking rate (LU per ha)	1.3	1.4
Inorganic nitrogen use (kg per ha)	44	46
Labour use – paid hours per cow	7.5	6.7
Labour use – unpaid hours per cow	8.0	5.6

Suckler cow enterprises kept on land classified as Disadvantaged Area (DA) or Severely Disadvantaged Area (SDA) by Defra. The output from the suckler herd is a calf at weaning.

# Less Favoured Area (LFA) Suckler Herds

- Average and top third net margins declined compared with last year, mainly due to lower output as a consequence of significantly higher replacement costs
- Top third herds achieved more weaned calf weight per forage hectare, due to higher stocking rates and more calves, with the same 200-day weaning weight
- Lower feed and forage costs were the largest individual contributor to lower overall costs for the top third
- Fixed costs accounted for more than half of the difference between the average and the top third

#### Financial performance (£ per cow to bull)

	Average	Top Third
Number of herds in sample	35	11
Average herd size (cows to bull)	77	93
Calf output	546.86	595.92
Other income	0.03	0.00
Gross Output	546.89	595.92
Replacement costs	77.93	87.08
Output less replacement costs	468.95	508.85
Variable Costs		
Purchased feed including minerals	40.49	22.24
Home-grown feed	10.42	15.51
Purchased forage	15.99	14.05
Home-grown forage variable costs	57.42	47.40
Total feed and forage	124.32	99.21
Vet and medicine	35.59	35.13
Bedding	30.34	34.61
Other livestock expenses Total variable costs	12.45 <b>202.70</b>	11.03
lotal variable costs	202.70	179.97
Gross Margin	266.25	328.88
Fixed Costs		
Labour – paid	44.41	60.24
Labour – unpaid	68.39	37.96
Machinery repairs and spares	30.97	27.37
Contracting	40.72	36.28
Electricity	2.38	1.73
Fuel Presente maintenance and water	30.49 21.41	28.56 23.40
Property maintenance and water Depreciation	68.19	47.07
Land rent (imputed and actual)	112.83	93.80
Imputed finance costs	41.49	41.33
Overheads	15.10	13.33
Total fixed costs	476.37	411.07
Net Margin (including imputed costs)	-210.12	-82.20

## **Physical performance**

Cow to bull ratio	Average 29	<b>Top Third</b> 31
Age at first calving Herds 2 year policy (%) Herds 2.5 year policy (%) Herds more than 2.5 year policy (%)	40 49 11	40 50 10
Percentage of cows/heifers scanned in-calf (%) Calves born alive per 100 cows/heifers to bull Calves born dead per 100 cows/heifers to bull Calves died from birth to weaning per 100 cows/heifers to bull Calves weaned per 100 cows/heifers to bull* Calf losses from birth to weaning (% of born alive) Calving period (first to last calf - weeks) Cows and heifers calving in first 3 weeks (%) Empty cows/heifers (%) Cow mortality (%) Herd replacement rate (%)	92 87 3 86 3 19.8 37.4 9.4 3.3 15.1	95 88 2 90 2 18.8 42.5 8.8 3.0 15.9
Average age at weaning (days)	234	246
Average weight at weaning (kg per head)	281	294
Daily liveweight gain to weaning (kg per day)	1.0	1.0
Weaned calf weight produced per forage hectare (kg at 200 day	vs) 178	245
Return per calf (£ per head)	640	677
Calf price (£ per kg lwt)	2.28	2.33
Weaned calves sold at weaning (%)	7	3
Weaned calves retained at weaning (%)	93	97
Total FW cow concentrate use (kg per cow)	143	86
Total DM cow concentrate use (kg per cow)	85	74
Average concentrate cost (£ per tonne)	194	201
Total FW forage (kg per cow)	4590	4815
Total DM forage (kg per cow)	1631	1660
Creep feed fed (kg per calf weaned)	59	41
Number of grazing weeks	29	29
Stocking rate (LU per ha)	1.0	1.4
Inorganic nitrogen use (kg per ha)	34	40
Labour use – paid hours per cow	4.6	5.9
Labour use – unpaid hours per cow	7.2	4.0

Further analysis of the LFA enterprises divided into those in DAs and SDAs. The land classification is as identified by Defra and an enterprise is allocated to the land classification it grazes and/or uses on the farm.

# Disadvantaged Area (DA) and Severely Disadvantaged Area (SDA) Suckler Herds

- While average net margins were negative for both DA and SDA herds, the average SDA net margin improved compared with last year due to lower replacement and variable costs
- DA herds had fewer live births and weaned fewer calves per 100 cows compared with last year, while SDA herds had more live births and weaned more calves on average
- Daily liveweight gains for both DA and SDA herds improved compared with last year, with calves being weaned at a younger age

#### Financial performance (£ per cow to bull)

	DA average	SDA average
Number of herds in sample	12	23
Average herd size (cows to bull)	111	59
Calf output	527.29	565.95
Other income	0.00	0.06
Gross Output	527.29	566.00
Replacement costs	89.38	66.77
Output less replacement costs	437.92	499.24
Variable Costs		
Purchased feed including minerals	18.08	62.35
Home-grown feed	14.19	6.75
Purchased forage	15.22	16.74
Home-grown forage variable costs	60.79	54.13
<b>Total feed and forage</b> Vet and medicine	<b>108.28</b> 37.66	<b>139.97</b> 33.56
Bedding	37.00	26.40
Other livestock expenses	10.76	14.10
Total variable costs	191.08	214.03
Gross Margin	246.83	285.21
Fixed Costs		
Labour – paid	35.10	53.49
Labour – unpaid	53.99	82.45
Machinery repairs and spares	29.72	32.19
Contracting	32.24	49.00
Electricity	2.40	2.36
Fuel Property maintenance and water	31.64 22.88	29.37 19.98
Depreciation	63.73	72.54
Land rent (imputed and actual)	113.70	111.98
Imputed finance costs	41.80	41.18
Overheads	12.87	17.27
Total fixed costs	440.06	511.81
Net Margin (including imputed costs)	-193.23	-226.60

## **Physical performance**

Cow to bull ratio	<b>average</b> 29	SDA average 28
Age at first calving Herds 2 year policy (%) Herds 2.5 year policy (%) Herds more than 2.5 year policy (%)	75 25 0	22 61 17
Percentage of cows/heifers scanned in-calf (%) Calves born alive per 100 cows/heifers to bull Calves born dead per 100 cows/heifers to bull Calves died from birth to weaning per 100 cows/heifers to bull Calves weaned per 100 cows/heifers to bull* Calf losses from birth to weaning (% of born alive) Calving period (first to last calf - weeks) Cows and heifers calving in first 3 weeks (%) Empty cows/heifers (%) Cow mortality (%) Herd replacement rate (%)	92 88 3 85 3 17.1 45.0 9.0 4.2 18.1	91 86 2 3 87 3 23.0 28.2 9.9 2.5 12.2
Average age at weaning (days)	232	235
Average weight at weaning (kg per head)	269	293
Daily liveweight gain to weaning (kg per day)	1.0	1.1
Weaned calf weight produced per forage hectare (kg at 200 days)	239	145
Return per calf (£ per head)	617	662
Calf price (£ per kg lwt)	2.31	2.26
Weaned calves sold at weaning (%)	0	13
Weaned calves retained at weaning (%)	100	87
Total FW cow concentrate use (kg per cow)	46	238
Total DM cow concentrate use (kg per cow)	39	130
Average concentrate cost (£ per tonne)	191	194
Total FW forage (kg per cow)	4970	4220
Total DM forage (kg per cow)	1689	1575
Creep feed fed (kg per calf weaned)	9	107
Number of grazing weeks	30	28
Stocking rate (LU per ha)	1.3	0.8
Inorganic nitrogen use (kg per ha)	34	34
Labour use – paid hours per cow	3.8	5.3
Labour use – unpaid hours per cow	5.7	8.6

Suckler cow enterprises kept on land defined as non-LFA by Defra which calve in spring.

e Repo

# Spring Calving Lowland Suckler Herds

- Lower cow mortality and fewer empty cows contributed to the top third having a greater number of calves born alive and weaned per 100 cows/heifers put to the bull
- Top third herds had lower variable costs entirely due to lower vet and medicine, bedding and other livestock costs
- Lower fixed costs accounted for 62% of the difference in net margin between average and top third herds, with lower labour costs (paid and unpaid) the largest contributor

#### Financial performance (£ per cow to bull)

	Average	Top Third
Number of herds in sample	60	20
Average herd size (cows to bull)	89	115
Calf output	524.66	548.16
Other income	2.22	4.34
Gross Output	526.88	552.50
Replacement costs	61.25	40.27
Output less replacement costs	465.63	512.23
Variable Costs		
Purchased feed including minerals	42.45	48.70
Home-grown feed	8.12	4.40
Purchased forage	17.03	22.46
Home-grown forage variable costs	50.08	42.22
Total feed and forage	117.68	117.79
Vet and medicine	28.90	21.60
Bedding	27.38	15.54
Other livestock expenses	17.61	15.96
Total variable costs	191.57	170.89
Gross Margin	274.05	341.35
Fixed Costs		
Labour – paid	93.87	75.23
Labour – unpaid	66.17	40.10
Machinery repairs and spares	24.36	14.47
Contracting	39.04	39.22
Electricity	2.50	1.45
	29.80	25.12
Property maintenance and water	21.00 65.36	21.85 43.79
Depreciation	05.30 126.03	43.79
Land rent (imputed and actual) Imputed finance costs	40.34	36.06
Overheads	20.34	17.34
Total fixed costs	<b>528.81</b>	417.13
Net Margin (including imputed costs)	-254.76	-75.78

## **Physical performance**

Cow to bull ratio Age at first calving	Average 30	<b>Top Third</b> 28
Herds 2 year policy (%)	54	50
Herds 2.5 year policy (%)	33	45
Herds more than 2.5 year policy (%)	13	5
Percentage of cows/heifers scanned in-calf (%) Calves born alive per 100 cows/heifers to bull Calves born dead per 100 cows/heifers to bull Calves died from birth to weaning per 100 cows/heifers to bull Calves weaned per 100 cows/heifers to bull* Calf losses from birth to weaning (% of born alive) Calving period (first to last calf - weeks) Cows and heifers calving in first 3 weeks (%) Empty cows/heifers (%) Cow mortality (%) Herd replacement rate (%)	92 87 4 84 4 17.2 28.8 9.4 2.4 17.3	94 89 4 4 85 4 19.7 22.1 8.0 1.6 16.1
Average age at weaning (days)	224	224
Average weight at weaning (kg per head)	296	307
Daily liveweight gain to weaning (kg per day)	1.2	1.2
Weaned calf weight produced per forage hectare (kg at 200 day	vs) 237	284
Return per calf (£ per head)	628	644
Calf price (£ per kg lwt)	2.13	2.10
Weaned calves sold at weaning (%)	4	4
Weaned calves retained at weaning (%)	96	96
Total FW cow concentrate use (kg per cow)	209	210
Total DM cow concentrate use (kg per cow)	128	149
Average concentrate cost (£ per tonne)	170	167
Total FW forage (kg per cow)	3663	3401
Total DM forage (kg per cow)	1355	1198
Creep feed fed (kg per calf weaned)	49	65
Number of grazing weeks	33	34
Stocking rate (LU per ha)	1.2	1.4
Inorganic nitrogen use (kg per ha)	38	36
Labour use – paid hours per cow	8.3	6.7
Labour use – unpaid hours per cow	6.7	4.7

Suckler cow enterprises kept on land defined as non-LFA or DA by Defra which calve in autumn.

# Autumn Calving Disadvantaged Area (DA) and Lowland Suckler Herds

- The range within the data suggests that forage use was higher among the better-performing herds
- The range also suggests that fixed costs, particularly labour, accounted for the largest difference between average and better-performing herds

#### Financial performance (£ per cow to bull)

	Average
Number of herds in sample Average herd size (cows to bull)	6 82
Calf output Other income <b>Gross Output</b> Replacement costs <b>Output less replacement costs</b>	629.79 0.00 <b>629.79</b> 92.33 <b>537.46</b>
Variable Costs Purchased feed including minerals Home-grown feed Purchased forage Home-grown forage variable costs Total feed and forage Vet and medicine Bedding Other livestock expenses Total variable costs	52.94 23.25 0.00 57.81 <b>134.00</b> 23.07 42.67 13.96 <b>213.69</b>
Gross Margin	323.76
Fixed Costs Labour – paid Labour – unpaid Machinery repairs and spares Contracting Electricity Fuel Property maintenance and water Depreciation Land rent (imputed and actual) Imputed finance costs Overheads Total fixed costs	29.95 74.03 26.90 24.58 1.54 27.70 22.61 69.60 101.36 41.25 17.30 <b>436.83</b>
Net Margin (including imputed costs)	-113.06

## **Physical performance**

Cow to bull ratio	Average 37
Age at first calving Herds 2 year policy (%) Herds 2.5 year policy (%) Herds more than 2.5 year policy (%)	50 50 0
Percentage of cows/heifers scanned in-calf (%)	N/A
Calves born alive per 100 cows/heifers to bull	90
Calves born dead per 100 cows/heifers to bull	3
Calves died from birth to weaning per 100 cows/heifers to bull	2
Calves weaned per 100 cows/heifers to bull*	88
Calf losses from birth to weaning (% of born alive)	2
Calving period (first to last calf - weeks)	20.3
Cows and heifers calving in first 3 weeks (%)	29.6
Empty cows/heifers (%)	8.3
Cow mortality (%)	3.2
Herd replacement rate (%)	15.8
Average age at weaning (days)	271
Average weight at weaning (kg per head)	329
Daily liveweight gain to weaning (kg per day)	1.1
Weaned calf weight produced per forage hectare (kg at 200 days	) 289
Return per calf (£ per head)	712
Calf price (£ per kg lwt)	2.17
Weaned calves sold at weaning (%)	0
Weaned calves retained at weaning (%)	100
Total FW cow concentrate use (kg per cow)	253
Total DM cow concentrate use (kg per cow)	219
Average concentrate cost (£ per tonne)	190
Total FW forage (kg per cow)	5967
Total DM forage (kg per cow)	1924
Creep feed fed (kg per calf weaned)	62
Number of grazing weeks	27
Stocking rate (LU per ha)	1.8
Inorganic nitrogen use (kg per ha)	56
Labour use – paid hours per cow	3.2
Labour use – unpaid hours per cow	7.8

These enterprises are a combination of suckler cow herds and related beef finishing enterprises on the same farm. The calves may be finished at any age and the suckler herds kept on non-LFA and LFA areas.

# **Combined Breeding/Finishing Herds**

- Average net margins improved compared with last year despite higher costs
- Top third herds had fewer calf losses and empty cows
- The top third achieved higher returns for animals sold finished and as stores compared with the average, at similar liveweights
- Lower purchased feed costs were the main contributor to lower variable costs for the top third
- Top third herds fed less cow and calf concentrates than the average, but had higher forage use per calf
- Fixed costs accounted for 55% of the difference between average and top third herds, mainly due to labour, land rent and depreciation

Financial performance (£ per cow to bull)

	Average	Top Third
Number of herds in sample	34	11
Average herd size (cows to bull)	92	152
Calf output	1095.08	1132.59
Other income	2.55	0.00
Gross Output	1097.63	1132.59
Replacement costs	65.63	68.16
Output less replacement costs	1032.01	1064.43
Variable Costs		
Purchased feed including minerals	184.77	102.32
Home-grown feed	40.70	31.85
Purchased forage	16.92	22.04
Home-grown forage variable costs	86.67	84.94
Total feed and forage	329.07	241.15
Vet and medicine	44.64	45.99
Bedding	68.23 43.67	56.36 39.67
Other livestock expenses Total variable costs	43.07 <b>485.61</b>	39.07 <b>383.17</b>
	405.01	303.17
Gross Margin	546.39	681.26
Fixed Costs		
Labour – paid	152.90	120.59
Labour – unpaid	110.81	62.32
Machinery repairs and spares	41.31	28.51
Contracting	41.97	37.42
Electricity	5.44	4.24
Fuel	53.50 47.16	48.78 50.11
Property maintenance and water Depreciation	121.30	87.49
Land rent (imputed and actual)	152.22	129.73
Imputed finance costs	71.90	68.86
Overheads	52.59	46.32
Total fixed costs	851.10	684.37
Net Margin (including imputed costs)	-304.70	-3.11

## **Physical performance**

Cow to bull ratio Age at first calving	Average 28	<b>Top Third</b> 27
Herds 2 year policy (%)	47	73
Herds 2.5 year policy (%)	44	27
Herds more than 2.5 year policy (%)	9	0
Percentage of cows/heifers scanned in-calf (%)	91	91
Calves born alive per 100 cows/heifers to bull	88	88
Calves born dead per 100 cows/heifers to bull	4	4
Calves died after birth per 100 cows/heifers to bull	3	3
Calves weaned per 100 cows/heifers to bull*	85	86
Calf losses from birth to disposal (% of born alive)	4	3
Calving period (first to last calf - weeks)	15.0	12.5
Cows calving in first 3 weeks of calving period (%)	35.0	38.0
Empty cows/heifers (%)	9.4	9.2
Cow mortality (%)	2.9	2.8
Herd replacement rate (%)	16.3	17.3
Average age at weaning (days)	224	215
Average age at disposal (days)	605	637
Average weight at weaning (kg per head)	291	282
Average liveweight at disposal (kg per head)	584	581
Average carcase weight (kg)	331	330
Daily liveweight gain birth to disposal (kg per day)	0.9	0.9
Calf return per head finished (£)	1314	1363
Calf return per head store (£)	964	1058
Liveweight sale price all disposals (£ per kg lwt)	2.21	2.28
Liveweight sale price: finished cattle (£ per kg lwt)	2.21	2.27
Deadweight sale price: finished cattle (£ per kg dwt)	3.97	4.14
Calves sold finished (%)	92	87
Calves sold store (%)	8	13
Total FW cow concentrate use (kg per cow)	189	67
Average concentrate cost (£ per tonne)	201	173
Total FW forage (kg per cow)	3747	3381
Total DM forage (kg per cow)	1484	1326
Total FW calf concentrate use (kg per calf)	1055	632
Total FW forage (kg per calf)	3868	4316
Total DM forage (kg per calf)	1326	1438
Inorganic nitrogen use (kg per ha)	45 13.5	52 11.4
Labour use - paid hours per cow Labour use - unpaid hours per cow	13.5	7.2

Stocktake Report 2014

These enterprises are a combination of suckler cow herds and related beef store enterprises where the majority of calves are subsequently sold as stores. The suckler herds can be kept on non-LFA and LFA areas.

# Combined Breeding/Store Herds

- Top third herds had fewer calf losses and more calves reared than average
- Average age and weight at disposal was higher for the top third, resulting in a higher return
- Cow and calf concentrate use in top third herds was lower than average with higher forage use
- Lower variable costs accounted for more of the difference between the average and the top third than lower fixed costs
- Top third herds had significantly lower labour (paid and unpaid) costs

#### Financial performance (£ per cow to bull)

	Average	Top Third
Number of herds in sample	23	7
Average herd size (cows to bull)	94	83
Calf output	834.78	927.51
Other income	0.28	0.00
Gross Output	835.05	927.51
Replacement costs	69.58	73.17
Output less purchase costs	765.48	854.34
Variable Costs		
Purchased feed including minerals	154.88	87.32
Home-grown feed	42.84	52.48
Purchased forage	50.41	6.28
Home-grown forage variable costs	61.55	51.37
Total feed and forage	309.68	197.45
Vet and medicine	34.96	28.56
Bedding Other livesteele superson	48.04 39.94	57.73 34.36
Other livestock expenses Total variable costs	<b>432.62</b>	34.30 <b>318.10</b>
	432.02	310.10
Gross Margin	332.86	536.24
Fixed Costs		
Labour – paid	88.23	32.57
Labour – unpaid	87.79	76.14
Machinery repairs and spares	43.88	34.98
Contracting	33.73	28.67
Electricity	3.27	2.83
Fuel Presente maintenance and water	42.73 36.22	27.75 33.22
Property maintenance and water Depreciation	102.62	120.18
Land rent (imputed and actual)	127.33	119.81
Imputed finance costs	57.40	61.11
Overheads	46.50	33.78
Total fixed costs	669.70	571.02
Net Margin (including imputed costs)	-336.85	-34.78

## **Physical performance**

Cow to bull ratio Age at first calving	Average 30	<b>Top Third</b> 29
Herds 2 year policy (%)	65	43
Herds 2.5 year policy (%)	26	57
Herds more than 2.5 year policy (%)	9	0
Percentage of cows/heifers scanned in-calf (%) Calves born alive per 100 cows/heifers to bull Calves born dead per 100 cows/heifers to bull Calves died after birth per 100 cows/heifers to bull Calves weaned per 100 cows/heifers to bull* Calf losses from birth to disposal (% of born alive) Calving period (first to last calf - weeks) Cows calving in first 3 weeks of calving period (%) Empty cows/heifers (%) Cow mortality (%) Herd replacement rate (%)	94 88 3 4 86 4 23.4 28.8 8.3 2.3 15.0	91 90 2 88 2 18.7 32.6 9.1 3.1 11.9
Average age at weaning (days)	231	243
Average age at disposal (days)	425	555
Average weight at weaning (kg per head)	285	298
Average liveweight at disposal (kg per head)	450	492
Average carcase weight (kg)	301	326
Daily liveweight gain birth to disposal (kg per day)	1.0	0.8
Calf return per head finished (£)	1246	1393
Calf return per head store (£)	937	1021
Liveweight sale price all disposals (£ per kg lwt)	2.18	2.15
Liveweight sale price: finished cattle (£ per kg lwt)	2.24	2.27
Deadweight sale price: finished cattle (£ per kg dwt)	4.13	4.27
Calves sold finished (%)	14	9
Calves sold store (%)	86	91
Total FW cow concentrate use (kg per cow)	315	247
Average concentrate cost (£ per tonne)	187	174
Total FW forage (kg per cow)	4655	5048
Total DM forage (kg per cow)	1685	1863
Total FW calf concentrate use (kg per calf)	885	468
Total FW forage (kg per calf)	2237	2872
Total DM forage (kg per calf)	792	941
Inorganic nitrogen use (kg per ha)	50	22
Labour use - paid hours per cow	8.4	3.7
Labour use - unpaid hours per cow	8.7	8.7

The focus of these systems is to finish the animals as quickly as possible, often with a reliance on cereal and by-product feeds, in addition to forage to ensure correct rumen function.

Report 201

# Beef Finishing (up to 16 months of age)

- Average herds achieved negative net margins compared with positive net margins last year
- Top third herds made a positive net margin of over £250 per head of output, with higher output, lower feed costs and lower fixed costs than the average
- The top third had greater carcase weights and daily liveweight gains than average
- Top third herds had a longer feeding period, but used less concentrate and more forage per head than average, with concentrates costing less per tonne

#### Financial performance (£ per head output)

	Average	Top Third
Number of enterprises in sample	28	9
Average head of output	72	86
Cattle output	1234.05	1296.48
Other income	0.00	0.00
Gross Output	1234.05	1296.48
Purchase costs	600.43	558.87
Output less purchase costs	633.62	737.61
Variable Costs		
Purchased feed including minerals	260.64	154.04
Home-grown feed	41.83	20.65
Purchased forage	4.58	1.18
Home-grown forage variable costs	19.31	24.41
<b>Total feed and forage</b> Vet and medicine	<b>326.36</b> 12.84	<b>200.27</b> 18.15
Bedding	48.24	31.14
Other livestock expenses	27.14	22.86
Total variable costs	414.58	272.42
Gross Margin	219.04	465.19
Fixed Costs		
Labour – paid	50.04	47.88
Labour – unpaid	28.83	9.41
Machinery repairs and spares	11.81 8.59	9.92 4.43
Contracting Electricity	1.88	4.43
Fuel	14.64	12.28
Property maintenance and water	17.59	12.20
Depreciation	39.65	26.51
Land rent (imputed and actual)	14.32	12.91
Imputed finance costs	24.14	25.06
Overheads	31.13	25.79
Total fixed costs	242.62	195.60
Net Margin (including imputed costs)	-23.58	269.59
	Average	Top Third
---	---------	-----------
Mortality (%)	1.5	2.1
Average age at start (days)	189	167
Average age at disposal (days)	438	452
Feeding period (days)	249	285
Average liveweight at start (kg)	293	239
Average liveweight at disposal (kg)	577	604
Daily liveweight gain (kg per day)	1.1	1.3
Average carcase weight (kg)	330	349
Purchase value per head (£)	593	548
Return per head finished (£)	1249	1296
Return per head store (£)	662	N/A
Purchase price (£ per kg lwt)	2.12	2.55
Liveweight sale price all disposals (£ per kg lwt)	2.14	2.14
Liveweight sale price: finished cattle (£ per kg lwt)	2.14	2.14
Deadweight sale price: finished cattle (£ per kg dwt)	3.77	3.72
Finished (%)	97	100
Store (%)	3	0
Output heifers (%)	23	22
Output steers (%)	11	4
Output bulls (%)	66	74
Total FW concentrate use (kg per head)	1724	1167
Total DM concentrate use (kg per head)	1305	815
Average concentrate cost (£ per tonne)	188	169
Total FW forage (kg per head)	2448	2760
Total DM forage (kg per head)	806	906
Stocking rate (LU per ha)	2.8	6.3
Inorganic nitrogen use (kg per ha)	80	151
Labour use – paid hours per head	4.0	3.5
Labour use – unpaid hours per head	2.8	1.0

These systems often include a grass grazing period and/or a reliance on forage as part of the ration. The primary objective of the system is to sell animals finished.

port 2014

## Beef Finishing (over 16 months of age)

- Net margins declined compared with the previous year, but top third herds still achieved positive net margins
- The top third had lower mortality and higher daily liveweight gain than average
- Top third herds achieved higher sale prices per kilogramme
- Greater output and lower purchase costs accounted for over half of the difference between top third and average herds
- Lower feed and forage costs (both home-grown and purchased) were the largest individual cost saving for the top third compared with the average, feeding less concentrate per head, but at a slightly higher price per tonne

#### Financial performance (£ per head output)

	Average	Top Third
Number of enterprises in sample	50	16
Average head of output	75	81
Cattle output	1272.36	1348.96
Other income	1.80	1.36
Gross Output	1274.16	1350.32
Purchase costs Output less purchase costs	681.32 <b>592.84</b>	638.21 <b>712.11</b>
Variable Costs Purchased feed including minerals	119.69	96.38
Home-grown feed	54.67	33.10
Purchased forage	7.91	4.28
Home-grown forage variable costs	38.20	28.46
Total feed and forage	220.47	162.22
Vet and medicine	12.56	12.58
Bedding	36.79	33.39
Other livestock expenses Total variable costs	35.66 <b>305.48</b>	36.70 <b>244.89</b>
	305.40	244.07
Gross Margin	287.36	467.22
Fixed Costs		
Labour – paid	58.30	56.48
Labour – unpaid	52.81 18.68	36.81 14.77
Machinery repairs and spares Contracting	29.95	29.96
Electricity	2.70	3.56
Fuel	24.19	18.24
Property maintenance and water	24.54	25.32
Depreciation	68.87	62.34
Land rent (imputed and actual)	58.71	55.05
Imputed finance costs Overheads	36.99 43.31	32.47 37.50
Total fixed costs	43.31 <b>419.05</b>	37.50 372.49
Net Margin (including imputed costs)	-131.69	94.73

	Average	Top Third
Mortality (%)	1.4	1.0
Average age at start (days)	319	329
Average age at disposal (days)	670	650
Feeding period (days)	352	321
Average liveweight at start (kg)	332	318
Average liveweight at disposal (kg)	592	597
Daily liveweight gain (kg per day)	0.8	0.9
Average carcase weight (kg)	324	326
Purchase value per head (£)	672	634
Return per head finished (£)	1279	1359
Return per head store (£)	1107	1169
Purchase price (£ per kg lwt)	2.05	1.99
Liveweight sale price all disposals (£ per kg lwt)	2.16	2.28
Liveweight sale price: finished cattle (£ per kg lwt)	2.15	2.27
Deadweight sale price: finished cattle (£ per kg dwt)	3.96	4.19
Finished (%)	96	95
Store (%)	4	5
Output heifers (%)	38	39
Output steers (%)	50	51
Output bulls (%)	12	10
Total FW concentrate use (kg per head)	911	702
Total DM concentrate use (kg per head)	678	484
Average concentrate cost (£ per tonne)	208	217
Total FW forage (kg per head)	4114	4223
Total DM forage (kg per head)	1387	1412
Number of full grazing weeks	21	21
Stocking rate (LU per ha)	1.4	1.4
Inorganic nitrogen use (kg per ha)	46	39
Labour use – paid hours per head	5.7	5.9
Labour use – unpaid hours per head	5.5	4.0

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.

501415

## **Beef Stores**

- Average net margins declined, however net margins for top third herds improved slightly compared with last year
- The top third had lower mortality than the average
- Top third herds used less concentrate at a lower cost per tonne than average herds
- The top third had lower variable and fixed costs
- Lower fixed costs accounted for 62% of the difference in net margin between the average and the top third. Lower labour, depreciation and land rent were the major contributors, although machinery, fuel and contracting costs were also noticeably lower

Financial performance (£ per head output)

	Average	Top Third
Number of enterprises in sample	34	11 79
Average head of output	75	19
Cattle output	887.89	986.80
Other income	0.23	0.00
Gross Output	888.13	986.80
Purchase costs Output less purchase costs	539.12 <b>349.01</b>	601.85 <b>384.95</b>
Output less purchase cosis	349.01	304.75
Variable Costs		
Purchased feed including minerals	99.26	83.63
Home-grown feed	33.23	13.10
Purchased forage	13.69 18.96	29.64 12.55
Home-grown forage variable costs Total feed and forage	<b>165.14</b>	138.92
Vet and medicine	13.04	7.96
Bedding	23.45	17.16
Other livestock expenses	25.82	34.08
Total variable costs	227.46	198.12
Gross Margin	121.55	186.83
Fixed Costs		
Labour – paid	22.48	27.70
Labour – unpaid	41.87	9.35
Machinery repairs and spares Contracting	19.36 11.63	8.63 3.41
Electricity	1.21	0.67
Fuel	15.73	7.95
Property maintenance and water	15.14	13.25
Depreciation	45.24	21.44
Land rent (imputed and actual)	31.39	14.38
Imputed finance costs Overheads	20.98 32.24	16.82 25.36
Total fixed costs	<b>257.27</b>	<b>148.97</b>
Net Margin (including imputed costs)	-135.73	37.87

	Average	Top Third
Mortality (%)	2.9	0.8
Average age at start (days)	210	264
Average age at disposal (days)	452	442
Feeding period (days)	242	178
Average liveweight at start (kg)	246	299
Average liveweight at disposal (kg)	443	447
Daily liveweight gain (kg per day)	1.0	0.9
Average carcase weight (kg)	280	327
Purchase value per head (£)	532	598
Return per head finished (£)	1010	1335
Return per head store (£)	877	978
Purchase price (£ per kg lwt)	2.37	1.99
Liveweight sale price all disposals (£ per kg lwt)	2.02	2.22
Liveweight sale price: finished cattle (£ per kg lwt)	1.93	2.21
Deadweight sale price: finished cattle (£ per kg dwt)	3.59	4.09
Finished (%)	8	3
Store (%)	92	97
Output heifers (%)	43	37
Output steers (%)	52	63
Output bulls (%)	5	0
Total FW concentrate use (kg per head)	761	680
Total DM concentrate use (kg per head)	543	450
Average concentrate cost (£ per tonne)	193	172
Total FW forage (kg per head)	2495	2498
Total DM forage (kg per head)	904	881
Number of full grazing weeks	12	8
Stocking rate (LU per ha)	1.5	1.7
Inorganic nitrogen use (kg per ha)	48	33
Labour use – paid hours per head	2.4	2.6
Labour use – unpaid hours per head	4.2	1.0

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

## Lowland Breeding Flocks

- Net margins for average and top third flocks declined compared with last year
- Top third flocks had fewer lambs die after birth per 100 ewes to ram
- Concentrate and creep feed use were lower in top third flocks
- The top third had a lower output per ewe than the average
- Top third flocks had lower variable and fixed costs, with the main contributors being lower feed costs and lower labour costs (paid and unpaid)

Financial performance (£ per ewe to ram)

	Average	Top Third
Number of flocks in sample	66	22
Average flock size (ewes to ram)	572	630
Lamb output	97.33	92.16
Other income	2.19	2.15
Gross Output Replacement costs	<b>99.52</b> 13.43	<b>94.31</b> 11.24
Output less replacement costs	86.09	83.07
Variable Costs		
Purchased feed including minerals	12.77	6.43
Home-grown feed	1.87 0.12	1.50 0.05
Purchased forage Home-grown forage variable costs	5.46	2.78
Total feed and forage	20.23	10.76
Vet and medicine	6.21	5.16
Bedding	1.29 6.42	0.54 4.10
Other livestock expenses Total variable costs	0.42 <b>34.15</b>	4.10 <b>20.56</b>
Gross Margin	51.94	62.51
Fixed Costs		
Labour – paid	13.68 17.63	9.26 12.97
Labour – unpaid Machinery repairs and spares	2.39	12.97
Contracting	2.89	2.01
Electricity	0.23	0.09
Fuel	3.29 1.73	2.65 1.06
Property maintenance and water Depreciation	6.58	3.97
Land rent (imputed and actual)	14.78	14.79
Imputed finance costs	1.27	0.84
Overheads	3.99	2.88
Total fixed costs	68.46	52.10
Net Margin (including imputed costs)	-16.51	10.41

	Average	Top Third
Ewe to ram ratio	47	47
Scanning percentage per ewe scanned (%)	177	176
Lambs born alive per 100 ewes to ram	155	147
Lambs born dead per 100 ewes to ram	10	9
Lambs died in first 48 hours per 100 ewes to ram	8	7
Lambs died after 48 hours per 100 ewes to ram	7	3
Lambs reared per 100 ewes to ram	140	136
Lamb losses from birth to rearing (% of born alive)	9	7
Empty ewes (%)	5.2	5.5
Ewe mortality (%)	3.7	3.7
Flock replacement rate (%)	18.5	18.0
Average age at weaning (days)	121	128
Average weight at weaning (kg)	32.2	32.5
Average liveweight per reared lamb (all lambs) (kg per lamb)	37.9	38.1
Average liveweight (kg lwt per lamb sold finished)	41.1	41.6
Average carcase weight (kg dwt per lamb sold finished)	19.4	20.1
Average store weight (kg lwt per lamb sold store)	32.4	37.1
Average age at sale (days)	147	146
Daily liveweight gain to sale (kg per day)	0.25	0.26
Lamb weight produced per forage hectare (kg)	416	385
Return per lamb sold finished (£)	79.44	80.44
Return per lamb sold store (£)	54.19	54.02
Reared lambs sold finished (%)	47	36
Reared lambs sold store (%)	9	5
Reared lambs sold breeding (%)	1	1
Reared lambs valued at end (%)	43	58
Total FW ewe concentrate use (kg per ewe)	41	22
Total DM ewe concentrate use (kg per ewe)	34	19
Average ewe concentrate cost (£ per tonne)	241	233
Total FW forage (kg per ewe)	331	394
Total DM forage (kg per ewe)	74	50
Creep feed per lamb reared (kg per lamb)	7	4
Number of full grazing weeks	44	47
Stocking rate (LU per ha)	0.9	0.9
Inorganic nitrogen use (kg per ha)	38	17
Labour use - paid hours per ewe	1.4	1.0
Labour use - unpaid hours per ewe	1.8	1.3

Sheep flocks kept on land classified as Disadvantaged Area (DA) or Severely Disadvantaged Area (SDA). The output from the sheep flock is lambs sold finished, breeding or store.

## Less Favoured Area (LFA) Breeding Flocks

- Net margins improved for both average and top third flocks compared with last year
- The top third fed less concentrate, creep feed and forage than the average, while paying a higher price per tonne for concentrate
- Higher output less replacement costs accounted for the largest portion of the difference in net margin between average and top third flocks, with fewer empty ewes, higher scanning percentages and lower deaths leading to more lambs reared
- Lower fixed costs for the top third came from lower total labour costs and lower land rent costs per ewe due to higher stocking rates

Financial performance (£ per ewe to ram)

	Average	Top Third
Number of flocks in sample	45	15
Average flock size (ewes to ram)	741	895
Lamb output	95.01	103.16
Other income	2.56	3.48
Gross Output	<b>97.57</b> 19.02	<b>106.63</b> 15.27
Replacement costs Output less replacement costs	<b>78.55</b>	<b>91.37</b>
Variable Costs		
Purchased feed including minerals	12.62	8.56
Home-grown feed	0.22	0.37
Purchased forage	0.14 5.67	0.20 4.78
Home-grown forage variable costs Total feed and forage	18.64	4.70 <b>13.92</b>
Vet and medicine	6.10	5.32
Bedding	0.61	0.41
Other livestock expenses	4.64	4.04
Total variable costs	29.98	23.69
Gross Margin	48.57	67.68
Fixed Costs		
Labour – paid	8.51 17.10	9.71
Labour – unpaid Machinery repairs and spares	2.96	13.71 2.00
Contracting	3.29	4.05
Electricity	0.18	0.17
Fuel	3.83	3.16
Property maintenance and water	1.57	1.42
Depreciation	6.75 13.96	3.72 10.71
Land rent (imputed and actual) Imputed finance costs	13.90	0.89
Overheads	2.59	2.60
Total fixed costs	62.22	52.14
Net Margin (including imputed costs)	-13.65	15.53

	Average	Top Third
Ewe to ram ratio	46	51
Scanning percentage per ewe scanned (%)	162	166
Lambs born alive per 100 ewes to ram	146	152
Lambs born dead per 100 ewes to ram	8	7
Lambs died in first 48 hours per 100 ewes to ram	7	7
Lambs died after 48 hours per 100 ewes to ram	6	6
Lambs reared per 100 ewes to ram	132	140
Lamb losses from birth to rearing (% of born alive)	9	8
Empty ewes (%)	4.7	3.5
Ewe mortality (%)	4.7	4.0
Flock replacement rate (%)	26.5	23.5
Average age at weaning (days)	117	120
Average weight at weaning (kg)	29.0	30.8
Average liveweight per reared lamb (all lambs) (kg per lamb)	36.7	37.4
Average liveweight (kg lwt per lamb sold finished)	40.8	41.9
Average carcase weight (kg dwt per lamb sold finished)	19.2	19.8
Average store weight (kg lwt per lamb sold store)	33.0	35.0
Average age at sale (days)	168	177
Daily liveweight gain to sale (kg per day)	0.22	0.22
Lamb weight produced per forage hectare (kg)	337	481
Return per lamb sold finished (£)	75.45	77.04
Return per lamb sold store (£)	56.26	64.17
Reared lambs sold finished (%)	39	45
Reared lambs sold store (%)	5	1
Reared lambs sold breeding (%)	6	6
Reared lambs valued at end (%)	50	48
Total FW ewe concentrate use (kg per ewe)	37	25
Total DM ewe concentrate use (kg per ewe)	29	22
Average ewe concentrate cost (£ per tonne)	250	272
Total FW forage (kg per ewe)	155	107
Total DM forage (kg per ewe)	61	43
Creep feed per lamb reared (kg per lamb)	8	3
Number of full grazing weeks	45	46
Stocking rate (LU per ha)	0.8	1.1
Inorganic nitrogen use (kg per ha)	20	19
Labour use - paid hours per ewe	0.9	1.0
Labour use - unpaid hours per ewe	1.8	1.4

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

## Disadvantaged Area (DA) and Severely Disadvantaged Area (SDA) Breeding Flocks

- Fewer lambs were born alive and reared per 100 ewes than last year for both DA and SDA flocks
- Compared with last year, a greater proportion of lambs were sold finished and fewer valued at end in both SDA and DA flocks
- For both SDA and DA flocks, variable costs were higher and fixed costs lower than last year
- Ranges within the data show that there were producers in both categories achieving positive net margins

Disadvantaged Area (DA) and Severely Disadvantaged Area (SDA) Breeding Flocks

Financial performance (£ per ewe to ram)

	DA Average	SDA Average
Number of flocks in sample Average flock size (ewes to ram)	16 953	29 625
Lamb output Other income	98.09 2.37	92.41 2.72
Gross Output Replacement costs	<b>100.46</b> 19.17	<b>95.13</b> 18.89
Output less replacement costs	81.30	76.24
<b>Variable Costs</b> Purchased feed including minerals Home-grown feed Purchased forage	9.77 0.33 0.23	15.01 0.13 0.06
Home-grown forage variable costs <b>Total feed and forage</b> Vet and medicine	4.22 <b>14.54</b> 6.95	6.88 <b>22.09</b> 5.38
Bedding Other livestock expenses	0.47 5.17	0.72 4.19
Total variable costs	27.13	32.38
Gross Margin	54.17	43.86
Fixed Costs Labour – paid Labour – unpaid Machinery repairs and spares Contracting Fuel Electricity Property maintenance and water Depreciation Land rent (imputed and actual) Imputed finance costs Overheads Total fixed costs	11.37 12.53 2.98 3.24 0.14 4.18 1.65 5.98 13.41 1.18 2.69 <b>59.36</b>	6.11 20.94 2.94 3.33 0.21 3.53 1.50 7.40 14.41 1.76 2.50 <b>64.63</b>
Net Margin (including imputed costs)	-5.19	-20.77

	DA Average	SDA
Ewe to ram ratio Scanning percentage per ewe scanned (%) Lambs born alive per 100 ewes to ram Lambs born dead per 100 ewes to ram Lambs died in first 48 hours per 100 ewes to ram Lambs died after 48 hours per 100 ewes to ram Lambs reared per 100 ewes to ram Lamb losses from birth to rearing (% of born alive) Empty ewes (%) Ewe mortality (%) Flock replacement rate (%)	50 166 148 7 7 6 136 9 4.2 5.2 25.0	Average 43 160 143 9 8 6 129 11 5.1 4.3 27.8
Average age at weaning (days) Average weight at weaning (kg) Average liveweight per reared lamb (all lambs) (kg per lamb Average liveweight (kg lwt per lamb sold finished) Average carcase weight (kg dwt per lamb sold finished) Average store weight (kg lwt per lamb sold store) Average age at sale (days) Daily liveweight gain to sale (kg per day) Lamb weight produced per forage hectare (kg)	41.0 19.3 32.6 157 0.23 443	122 28.5 36.5 40.7 19.2 33.0 178 0.22 277
Return per lamb sold finished (£)	76.13	74.73
Return per lamb sold store (£)	59.36	55.58
Reared lambs sold finished (%)	43	36
Reared lambs sold store (%)	2	7
Reared lambs sold breeding (%)	4	8
Reared lambs valued at end (%)	51	49
Total FW ewe concentrate use (kg per ewe)	27	46
Total DM ewe concentrate use (kg per ewe)	23	34
Average ewe concentrate cost (£ per tonne)	274	238
Total FW forage (kg per ewe)	173	140
Total DM forage (kg per ewe)	60	62
Creep feed per lamb reared (kg per lamb)	2	13
Number of full grazing weeks	46	45
Stocking rate (LU per ha)	1.0	0.7
Inorganic nitrogen use (kg per ha)	17	22
Labour use - paid hours per ewe Labour use - unpaid hours per ewe	1.3 1.3	0.7 2.1 57

Sheep flocks kept on land defined as non-LFA by Defra, where the sheep lamb from February to the end of March.

## Lowland February/March Lambing Breeding Flocks

- Top third flocks reared more lambs per ewe than average flocks, with more lambs born and fewer deaths
- The top third produced more lamb weight per forage hectare than the average
- Top third flocks made a positive net margin
- Lower fixed costs accounted for the majority of the difference in net margin, with the greatest difference being in labour costs (paid and unpaid)

Financial performance (£ per ewe to ram)

	Average	Top Third
Number of flocks in sample	34	11
Average flock size (ewes to ram)	540	573
Lamb output	106.20	116.68
Other income	2.33	2.17
Gross Output Replacement costs	<b>108.52</b> 15.94	<b>118.85</b> 17.53
Output less replacement costs	<b>92.59</b>	101.32
Variable Costs		
Purchased feed including minerals	18.13	22.53
Home-grown feed	3.14 0.17	1.68 0.19
Purchased forage Home-grown forage variable costs	6.27	6.67
Total feed and forage	27.71	31.07
Vet and medicine	7.36	7.01
Bedding	1.77	1.23
Other livestock expenses Total variable costs	7.88 <b>44.73</b>	7.30 <b>46.62</b>
	44.73	40.02
Gross Margin	47.86	54.69
Fixed Costs		
Labour – paid	14.99	6.98
Labour – unpaid Machinery repairs and spares	17.46 2.89	12.01 1.82
Contracting	2.85	1.61
Fuel	0.29	0.17
Electricity	3.50	2.47
Property maintenance and water	2.20	1.35
Depreciation Land rent (imputed and actual)	8.08 14.72	5.99 15.39
Imputed finance costs	1.50	1.35
Overheads	4.10	3.80
Total fixed costs	72.58	52.93
Net Margin (including imputed costs)	-24.72	1.77

	Average	Top Third
Ewe to ram ratio	45	44
Scanning percentage per ewe scanned (%)	181	194
Lambs born alive per 100 ewes to ram	156	161
Lambs born dead per 100 ewes to ram	10	9
Lambs died in first 48 hours per 100 ewes to ram	6	5
Lambs died after 48 hours per 100 ewes to ram	8	7
Lambs reared per 100 ewes to ram	142	149
Lamb losses from birth to rearing (% of born alive)	9	7
Empty ewes (%)	5.6	4.2
Ewe mortality (%)	3.8	3.9
Flock replacement rate (%)	19.8	23.1
Average age at weaning (days)	119	122
Average weight at weaning (kg)	33.1	33.6
Average liveweight per reared lamb (all lambs) (kg per lamb)	39.2	39.3
Average liveweight (kg lwt per lamb sold finished)	40.9	41.0
Average carcase weight (kg dwt per lamb sold finished)	19.1	19.0
Average store weight (kg lwt per lamb sold store)	35.7	37.1
Average age at sale (days)	150	152
Daily liveweight gain to sale (kg per day)	0.26	0.25
Lamb weight produced per forage hectare (kg)	418	460
Return per lamb sold finished (£)	79.93	81.63
Return per lamb sold store (£)	52.98	51.85
Reared lambs sold finished (%)	63	66
Reared lambs sold store (%)	6	9
Reared lambs sold breeding (%)	<1	0
Reared lambs valued at end (%)	30	25
Total FW ewe concentrate use (kg per ewe)	58	56
Total DM ewe concentrate use (kg per ewe)	48	46
Average ewe concentrate cost (£ per tonne)	237	247
Total FW forage (kg per ewe)	259	317
Total DM forage (kg per ewe)	79	81
Creep feed per lamb reared (kg per lamb)	13	19
Number of full grazing weeks	43	42
Stocking rate (LU per ha)	0.9	0.9
Inorganic nitrogen use (kg per ha)	44	54
Labour use - paid hours per ewe	1.5	0.9
Labour use - unpaid hours per ewe	1.9	1.7

Sheep flocks kept on land defined as non-LFA by Defra, where the sheep lamb from April through to May.

## Lowland April/May Lambing Breeding Flocks

- Top third flocks had lower output due to fewer lambs born alive and lamb deaths
- The top third used less ewe concentrate, less lamb creep and less inorganic nitrogen
- Top third flocks achieved positive net margins due to lower variable and fixed costs
- The top third housed sheep for a shorter period, therefore reducing bedding costs, with other livestock costs including vet and medicine also being lower
- Top third flocks had lower fixed costs in all areas, in particular lower labour costs (paid and unpaid)

Financial performance (£ per ewe to ram)

	Average	Top Third
Number of flocks in sample	30	10
Average flock size (ewes to ram)	635	739
Lamb output	88.26	76.72
Other income	2.04	1.55
Gross Output	<b>90.30</b> 11.00	<b>78.27</b> 8.49
Replacement costs Output less replacement costs	<b>79.30</b>	<b>69.78</b>
Variable Costs		
Purchased feed including minerals	7.50	1.96
Home-grown feed	0.69	0.46
Purchased forage Home-grown forage variable costs	0.06 4.73	0.02 2.06
Total feed and forage	12.98	<b>4.50</b>
Vet and medicine	5.04	3.20
Bedding	0.81	0.16
Other livestock expenses	4.98	2.40
Total variable costs	23.81	10.26
Gross Margin	55.48	59.52
Fixed Costs		
Labour – paid	12.66	10.36
Labour – unpaid Machinery repairs and spares	17.54 1.90	8.44 1.14
Contracting	2.94	2.23
Electricity	0.17	0.05
Fuel	3.06	1.58
Property maintenance and water	1.21 5.10	0.74 2.50
Depreciation Land rent (imputed and actual)	14.95	13.95
Imputed finance costs	1.05	0.44
Överheads	3.84	2.66
Total fixed costs	64.42	44.08
Net Margin (including imputed costs)	-8.94	15.44

	Average	Top Third
Ewe to ram ratio	49	49
Scanning percentage per ewe scanned (%)	173	162
Lambs born alive per 100 ewes to ram	154	142
Lambs born dead per 100 ewes to ram	9	12
Lambs died in first 48 hours per 100 ewes to ram	9	8
Lambs died after 48 hours per 100 ewes to ram	5	3
Lambs reared per 100 ewes to ram	140	131
Lamb losses from birth to rearing (% of born alive)	9	8
Empty ewes (%)	4.8	7.0
Ewe mortality (%)	3.5	4.0
Flock replacement rate (%)	17.0	16.0
Average age at weaning (days)	122	127
Average weight at weaning (kg)	31.5	30.1
Average liveweight per reared lamb (all lambs) (kg per lamb)	36.5	36.0
Average liveweight (kg lwt per lamb sold finished)	41.6	38.7
Average carcase weight (kg dwt per lamb sold finished)	19.9	20.6
Average store weight (kg lwt per lamb sold store)	31.1	37.1
Average age at sale (days)	144	128
Daily liveweight gain to sale (kg per day)	0.24	0.28
Lamb weight produced per forage hectare (kg)	411	375
Return per lamb sold finished (£)	77.73	79.43
Return per lamb sold store (£)	54.69	59.55
Reared lambs sold finished (%)	30	16
Reared lambs sold store (%)	12	3
Reared lambs sold breeding (%)	2	<1
Reared lambs valued at end (%)	56	81
Total FW ewe concentrate use (kg per ewe) Total DM ewe concentrate use (kg per ewe) Average ewe concentrate cost (£ per tonne) Total FW forage (kg per ewe) Total DM forage (kg per ewe) Creep feed per lamb reared (kg per lamb)	25 21 249 398 69 1	6 243 638 68 <1
Number of full grazing weeks	46	49
Stocking rate (LU per ha)	0.9	0.9
Inorganic nitrogen use (kg per ha)	27	12
Labour use - paid hours per ewe	1.3	0.9
Labour use - unpaid hours per ewe	1.7	0.8

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

## Store Lamb Finishing

- Top third flocks achieved positive net margins which were slightly higher than last year
- The top third had lower mortality than the average
- Concentrate use was lower for top third flocks at a lower cost per tonne, with higher home-grown forage costs, resulting in a similar daily liveweight gain
- Lower variable costs and fixed costs accounted for 70% of the difference between average and top third net margins

Financial performance (£ per head output)

	Average	Top Third
Number of enterprises in sample	37	12
Average head of output	564	698
Lamb output	80.40	80.00
Other income	0.02	0.03
Gross Output Purchase costs	<b>80.42</b> 58.82	<b>80.03</b> 54.55
Output less purchase costs	<b>21.60</b>	<b>25.49</b>
Variable Costs		
Purchased feed including minerals	4.47	2.16
Home-grown feed	1.35	0.86
Purchased forage Home-grown forage variable costs	0.00 1.07	0.00 1.45
Total feed and forage	6.89	4.47
Vet and medicine	0.85	0.56
Bedding	0.29	0.11
Other livestock expenses	3.48	2.33
Total variable costs	11.52	7.47
Gross Margin	10.08	18.01
Fixed Costs		
Labour – paid	2.82	0.83
Labour – unpaid Machinery repairs and spares	3.26 0.72	2.88 0.31
Contracting	0.47	0.37
Electricity	0.08	0.02
Fuel	1.00	0.83
Property maintenance and water	1.32	0.86
Depreciation Land rent (imputed and actual)	1.83 2.04	1.41 1.49
Imputed finance costs	0.91	0.85
Overheads	3.03	2.79
Total fixed costs	17.47	12.64
Net Margin (including imputed costs)	-7.39	5.38

	Average	Top Third
Mortality %	1.8	1.1
Feeding period (days)	120	115
Average liveweight at start (kg)	33.9	33.8
Average liveweight at disposal (kg)	43.0	44.1
Daily liveweight gain (kg per day)	0.09	0.09
Average carcase weight (kg)	19.6	19.8
Purchase value per lamb (£)	57.77	53.96
Return per lamb (£)	80.40	80.00
Liveweight price all disposals (£ per kg lwt)	1.88	1.82
Return per kg deadweight: finished lambs (£ per kg dwt)	4.03	3.92
Lambs sold finished (%)	93	93
Lambs sold or retained breeding (%)	7	7
Total FW concentrate use (kg per lamb)	25	16
Average concentrate cost (£ per tonne)	228	183
Inorganic nitrogen use (kg per ha)	16	22
Labour use - paid hours per ewe	0.3	0.1
Labour use - unpaid hours per ewe	0.3	0.3



All the data relates to enterprises with production cycles ending during the year to 31 March 2014. 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 MARGIN**

Equates to the value of output (including transfers to other farm enterprises and onfarm consumption), minus purchase or replacement costs and the variable costs.

Other income for the enterprise can include, for example, the value of manure transferred to an arable enterprise.

#### **NET MARGIN**

Equates to the value of output minus both the variable and fixed costs (including the value of family labour, imputed rental cost of owner-occupied land and imputed interest on working capital) and represents the net return to the enterprise.

Results have been ranked into top third on the basis of 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 (e.g. by-products, wet feeds) that can be fed to livestock, these feeds are converted to a concentrate equivalent (88% dry matter) 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 (e.g. barley) are costed to the enterprise at market value.

# Home-grown forage variable costs

Includes fertiliser, seed, spray and sundry (e.g. 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 opportunity cost of any homegrown bedding used.

#### **Other livestock expenses**

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

#### FIXED COSTS are defined as follows:

#### Labour costs

Regular full-time/part-time wages and casual wages for paid labour. The value of unpaid family labour is shown separately. Unpaid family labour is the value of family labour that is not paid directly from farm accounts.

In addition to an hourly rate, 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.

#### 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.

#### Land rent (imputed and actual)

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

#### **Imputed finance costs**

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

#### **Overheads**

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

These are allocated on an enterprise Gross Output basis. Therefore, SPS and Environmental Scheme payments carry a proportion of these costs.

#### **PHYSICAL PERFORMANCE:**

The calculated weighted average will not include any zero return where data is not available or not recorded on an individual farm (e.g. 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 % 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 (i.e. by removing the bull to result in different calving blocks), the calving period is a weighted average of the blocks. In these instances, the % born in the first three weeks is also a weighted average of the blocks.

#### **Daily liveweight 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 (e.g. home-grown silage). It does not include any area of away-grazing or area required to grow concentrates (purchased or homegrown) 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.





Stoneleigh Park Kenilworth Warwickshire CV8 2TL Tel: 024 7669 2051

www.eblex.org.uk

EBLEX is a division of the Agriculture and Horticulture Development Board (AHDB). Published October 2014. © Agriculture and Horticulture Development Board. All rights reserved.





