

Dairy performance results 2018/19

Annex: All-year-round calving herds by subsystem

Introduction

AHDB has published technical and financial performance for AYR (all-year-round), autumn block and spring block calving herds in the [Dairy performance results 2018/19](#). Diversity in herds who consider themselves as AYR calving can make it difficult to benchmark performance for this system. As a result we've now split our data for AYR calving herds into the three groups to reflect different subsystems within AYR:

- **AYR calving herds yielding over 9,500 litres** – herds with a flat calving profile, yielding more than 9,500 litres/cow/year. 'Flat calving profile' means calvings are evenly spread throughout the year over 12, 11 or 10 months. For 12 months 3.3%-13.3% of calvings occur each month of the year. For 11 months 4.1%-14.1% of calvings occur in each of the 11 months. For 10 months 5-15% of calvings occur in each of the 10 months.
- **AYR calving herds yielding below 9,500 litres** – herds with a flat calving profile (as described above), yielding less than 9,500 litres/cow/year.
- **Undefined system** - herds that do not have either a flat AYR or block calving profile (block calving is defined as herds who calve the majority of their cows within a four month window in autumn or spring).

About the figures

- Accounts from 258 AYR calving herds in GB in 2018/19 have been ranked by output/input ratio, then grouped into quartiles.
- All farms are conventional (i.e. not organic).
- The averages for the top 25% and middle 50% groups are reported here
- Youngstock output and costs are included
- Subsidies are excluded
- The data is sourced from Promar International and partners
- Sample size varies between the subgroups reported here, due to the spread of farms in each group within GB - this means there is likely to be more variation in subgroups with larger sample sizes
- If you would like more information about the data, please take a look at the [Dairy performance results 2018/19](#).

All-year-round calving herds yielding over 9,500 litres – performance in 2018/19

Table 1. Technical performance of 28 AYR calving conventional GB dairy herds with a truly flat calving profile yielding over 9,500 litres in 2018/19, when ranked by output/input ratio

	Top 25%	Middle 50%
Herd		
Average herd size	478	356
Dairy stocking density (livestock units/ha)	1.9	2.6
Labour - paid and unpaid (hours/cow/year)	33	33
Milk production		
Milk production (l/cow/year)	11,018	10,512
Milk solids production (kg/cow/year)	819	770
Average butterfat (%)	4.0	3.9
Average protein (%)	3.3	3.2
Milk from forage (l/cow/year)	3,438	3,047
Calving		
Age at first calving (months)	25	26
Calving interval (days)	403	394
Herd replacement		
Herd replacement rate (%)	32	31
Number of lactations	4.0	3.4
Average daily lifetime yield (litres/day)	18	17
Dairy herd replacement cost (ppl)	2.3	2.5
Dairy herd replacement cost (£/cow)	256	270

Source: AHDB, Promar International and partners

Table 2. Financial performance of 28 AYR calving conventional GB dairy herds with a truly flat calving profile yielding over 9,500 litres in 2018/19, when ranked by output/input ratio (including dairy youngstock output and costs)

Pence per litre (ppl)	Top 25%	Middle 50%
Output		
Milk sales	30.4	30.1
Calf sales	1.0	0.9
Cow sales	1.7	1.7
Youngstock heifer sales	0.1	0.3
Other income	0.0	0.0
Dairy herd valuation change	0.4	0.3
Youngstock herd valuation change	0.4	-0.1
Total output	34.0	33.1
Livestock purchases	0.4	1.4
Variable costs		
Purchased concentrates for dairy herd	8.8	9.1
Purchased concentrates for youngstock	1.1	1.3
Purchased forage and short-term keep	0.6	3.1
Home grown concentrate and forage costs	0.9	1.0
Total feed and forage costs	11.5	14.5
Veterinary and medicine costs	1.1	0.9
Other livestock costs	2.6	3.0
Total variable costs	15.2	18.5
Overhead costs		
Labour - paid	3.0	3.0
Labour - unpaid	1.1	0.9
Power and machinery	3.4	3.5
Machinery and equipment depreciation	1.0	0.9
Property repairs	0.5	0.4
Buildings depreciation	0.4	0.3
Rent	1.3	0.7
Rental value of owned land	0.2	0.3
Finance	1.0	0.8
Other operational costs	0.9	0.9
Overheads (excluding rent and finance)	10.2	9.9
Total overhead costs	12.7	11.8
Total production costs and margins		
Cash cost of production	25.6	29.3
Cash net margin	7.6	3.6
Full economic cost of production	28.3	31.7
Full economic net margin	5.7	1.4

Totals may not sum due to rounding. Source: AHDB, Promar International and partners

All-year-round calving herds yielding below 9,500 litres – performance in 2018/19

Table 3. Technical performance of 94 AYR calving conventional GB dairy herds with a truly flat calving profile yielding below 9,500 litres in 2018/19, when ranked by output/input ratio

	Top 25%	Middle 50%
Herd		
Average herd size	291	229
Dairy stocking density (livestock units/ha)	2.1	1.9
Labour - paid and unpaid (hours/cow/year)	30	38
Milk production		
Milk production (l/cow/year)	7,971	7,979
Milk solids production (kg/cow/year)	602	606
Average butterfat (%)	4.0	4.1
Average protein (%)	3.3	3.3
Milk from forage (l/cow/year)	2,764	2,792
Calving		
Age at first calving (months)	26	27
Calving interval (days)	398	400
Herd replacement		
Herd replacement rate (%)	27	30
Number of lactations	3.9	3.8
Average daily lifetime yield (litres/day)	13	13
Dairy herd replacement cost (ppl)	2.6	3.0
Dairy herd replacement cost (£/cow)	209	247

Source: AHDB, Promar International and partners

Table 4. Financial performance of 94 AYR calving conventional GB dairy herds with a truly flat calving profile yielding below 9,500 litres in 2018/19, when ranked by output/input ratio (including dairy youngstock output and costs)

Pence per litre (ppl)	Top 25%	Middle 50%
Output		
Milk sales	29.6	29.6
Calf sales	1.7	1.1
Cow sales	1.9	2.6
Youngstock heifer sales	0.3	0.2
Other income	0.0	0.0
Dairy herd valuation change	0.0	-0.1
Youngstock herd valuation change	0.1	0.0
Total output	33.7	33.3
Livestock purchases	0.3	0.9
Variable costs		
Purchased concentrates for dairy herd	7.9	8.2
Purchased concentrates for youngstock	1.4	1.6
Purchased forage and short-term keep	1.0	1.2
Home grown concentrate and forage costs	1.8	1.8
Total feed and forage costs	12.1	12.8
Veterinary and medicine costs	1.1	1.2
Other livestock costs	2.9	3.1
Total variable costs	16.1	17.1
Overhead costs		
Labour - paid	2.3	2.9
Labour - unpaid	2.1	2.6
Power and machinery	3.5	5.0
Machinery and equipment depreciation	0.8	1.4
Property repairs	0.6	0.6
Buildings depreciation	0.2	0.3
Rent	0.9	1.0
Rental value of owned land	0.8	0.7
Finance	0.7	1.1
Other operational costs	1.1	1.4
Overheads (excluding rent and finance)	10.6	14.2
Total overhead costs	13.1	16.9
Total production costs and margins		
Cash cost of production	25.5	29.9
Cash net margin	8.0	3.5
Full economic cost of production	29.5	34.9
Full economic net margin	4.2	-1.5

Totals may not sum due to rounding. Source: AHDB, Promar International and partners

Undefined system herds – performance in 2018/19

Table 5. Technical performance of 136 conventional GB dairy herds with an undefined system in 2018/19, when ranked by output/input ratio

Herd	Top 25%	Middle 50%
Average herd size	266	191
Dairy stocking density (livestock units/ha)	2.0	1.9
Labour - paid and unpaid (hours/cow/year)	32	40
Milk production		
Milk production (l/cow/year)	8,485	8,278
Milk solids production (kg/cow/year)	649	630
Average butterfat (%)	4.1	4.1
Average protein (%)	3.3	3.3
Milk from forage (l/cow/year)	3,032	2,969
Calving		
Age at first calving (months)	27	27
Calving interval (days)	401	399
Herd replacement		
Herd replacement rate (%)	27	29
Number of lactations	3.9	3.8
Average daily lifetime yield (litres/day)	14	13
Dairy herd replacement cost (ppl)	2.7	3.1
Dairy herd replacement cost (£/cow)	227	264

Source: AHDB, Promar International and partners

Table 6. Financial performance of 136 conventional GB dairy herds with an undefined system in 2018/19, when ranked by output/input ratio (including dairy youngstock output and costs)

ppl costs	Top 25%	Middle 50%
Output		
Milk sales	30.9	29.7
Calf sales	1.3	1.0
Cow sales	1.7	2.2
Youngstock heifer sales	0.1	0.1
Other income	0.0	0.0
Dairy herd valuation change	0.2	-0.4
Youngstock herd valuation change	0.0	0.1
Total output	34.4	32.8
Livestock purchases	0.7	0.7
Variable costs		
Purchased concentrates for dairy herd	7.7	8.3
Purchased concentrates for youngstock	1.1	1.6
Purchased forage and short-term keep	1.1	1.0
Home grown concentrate and forage costs	1.5	1.6
Total feed and forage costs	11.4	12.6
Veterinary and medicine costs	1.1	1.2
Other livestock costs	2.6	3.1
Total variable costs	15.1	16.9
Overhead costs		
Labour - paid	2.9	3.1
Labour - unpaid	1.5	2.4
Power and machinery	4.1	4.6
Machinery and equipment depreciation	0.7	1.2
Property repairs	0.9	0.6
Buildings depreciation	0.4	0.3
Rent	1.0	0.9
Rental value of owned land	0.4	0.7
Finance	0.7	0.9
Other operational costs	1.0	1.4
Overheads (excluding rent and finance)	11.5	13.6
Total overhead costs	13.6	16.1
Total production costs and margins		
Cash cost of production	26.4	29.1
Cash net margin	7.7	4.0
Full economic cost of production	29.4	33.6
Full economic net margin	5.0	-0.8

Totals may not sum due to rounding. Source: AHDB, Promar International and partners