The small print

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Contents

• Key topics:
  • Herd size - inseminations, calf numbers and calving patterns
  • Feed market update
  • Forage
  • Costs
  • Yields
  • Compositional quality

• Milk forecast
Herd size, inseminations and calvings
Retention rate

• Retention of cows over 6 month period
• We seasonally adjust because Oct always high and Apr always low – allows us to see trends easier
• Retention rates were easing off but July was level yoy – against expectations
• Retention rates are higher for younger animals

Source: BCMS, AHDB
*Seasonally adjusted 6-monthly retention rate for 2-8yrs
Herd size expectation

- AHDB projection of number of cows in the GB dairy herd
- Based on predicted youngstock numbers (from insemination data) and 3 year average retention rates
- Expectation that milking herd will be around 1.61m by July 2023, down 0.9% year-on-year
- Herd decline projected to flatten off due to higher youngstock numbers
- Adjusted following previous forum to include increased culling levels – but rising youngstock numbers keep pushing up the future herd

Source: BCMS, AHDB

Actuals currently available to July 2022
Have youngstock numbers peaked?

- Youngstock numbers (0-24m) have levelled off after 2 years of increases.
- Rising youngstock from 2020 will start coming into the main herd this year.
- Is this a blip, or the start of a decline?
- Feedback was that we may see some more increase off the back of this year’s autumn calvings, but likely to level out longer-term.

Source: BCMS

Sorted semen sales may have also peaked

- Beef and sorted dairy semen have substantially increased share of sales
- Sorted dairy starting to ease off while beef continues to climb
- Feedback was that slight decline in sorted sales likely due to farmers having a better gauge on how much they need vs previously overbuying
Expected dairy replacements

- Estimates of the number of 0-6 month old females based on insemination data
- Projection was above actuals in January and July
- Actual 0-6 month olds were down 2% yoy in July 22 – first time since 2019
- Insemination data suggests fewer replacements born in the next year – but youngstock levels still high
- Does not necessarily lead to an increase in the herd size – just a reduction in the average age

Source: AHDB, BCMS
Age structure of the herd

- Movement in herd by age group
- Overall annual drop in milking herd at July was 1.4%
- Majority of decline has come from the 4-6 year olds
- Youngstock numbers remain high
- Transition into main herd is starting – 24-30m up 3% yoy, 18-24m are up 5% yoy and will join next

Annual change in GB dairy herd by age as at 1 July 2022

Source: BCMS

Future age structure of herd

• Using current projections 2-4 year olds will increase while older groups continue to decline.

• Is this a reasonable expectation?

• Feedback was that actual number of heifers making it into the herd will be highly dependent on the financial situation going forwards.
Cow prices have been high but cow slaughter low

Note: data is for all cows so will include beef breeding cows as well as dairy cows.
2021 data confirms shift towards calving systems

- Increase in farmers following calving systems (vs “non-defined” calving pattern)
- Increase in block calving has increased peak, moved trough to summer and flattened autumn milk production

Births to dairy dams dropped off in Q2

• Q2 2022 calf registrations were lowest Q2 since 2013. (down 1.1% yoy)

• Jan-Jun 2022 still 2.5% above 5-year average

• Shift shows the effect of increase in block calving systems.

Source: BCMS
Please note that 2020 is a leap year.
Feed market update: where are prices heading?

Olivia Bonser, Cereals & Oilseeds Analyst
New crop UK prices following global wheat.
Supply concerns - strengthening prices

- Russian exports
- Ukrainian exports
- Ukrainian planting
- US maize
- EU maize
- Biofuel demand

Tightening global wheat

Other factors to think about for feed grains…
Where are ex-farm prices currently?

Average monthly ex-farm prices

- Feed wheat
- Feed barley
- Feed oats

£/tonne

<table>
<thead>
<tr>
<th>Month</th>
<th>Feed Wheat</th>
<th>Feed Barley</th>
<th>Feed Oats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep</td>
<td>175</td>
<td>165</td>
<td>150</td>
</tr>
<tr>
<td>Oct</td>
<td>180</td>
<td>170</td>
<td>160</td>
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<tr>
<td>Nov</td>
<td>185</td>
<td>175</td>
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<tr>
<td>Dec</td>
<td>190</td>
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<td>Jan</td>
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<td>Jul</td>
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<tr>
<td>Aug</td>
<td>230</td>
<td>220</td>
<td>210</td>
</tr>
</tbody>
</table>
England cereal and oilseed crop areas 2022

- Winter cropping up
- Wheat area up on the year
- Increase in winter barley area outweighed by drop in spring barley
- Oilseed rape area up
GB Harvest progress - to 23 August

- Winter wheat: 98% (8.2 – 8.6 t/ha)
- Winter barley: 100% (7.2 – 7.4 t/ha)
- Spring barley: 81% (5.5 – 5.9 t/ha)
- Oats: 90% (5.1 – 5.9 t/ha)
- Winter OSR: 100% (3.2 – 3.6 t/ha)
Barley and wheat production

**UK wheat and barley production**

<table>
<thead>
<tr>
<th>Year</th>
<th>Wheat</th>
<th>Barley</th>
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</thead>
<tbody>
<tr>
<td>2020</td>
<td>13,988</td>
<td>6,961</td>
</tr>
<tr>
<td>2021</td>
<td>14,328</td>
<td>6,746</td>
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<tr>
<td>2022*</td>
<td>9,658</td>
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</table>

*Source: AHDB, Defra

**Demand**
- Feed ration usage
- Strong H&I demand
- High biofuel demand

**Supply**
- Wheat production up
- Barley production down
Where now?

- Volatile in the short term
- Ukrainian exports resuming but prices supported by maize prices
- Limited global supply long term

- Hot and dry weather in the US and EU tightening supply outlook
- Weather will remain a watchpoint as Northern Hemisphere harvest progresses

- Both domestic and global barley market remain tight
- Market following the wider grains complex

NB – Price indicators based on current market dynamics.
Oilseeds – market drivers

Rapeseed – 2022/23 tight global S&D

Soyabees – large US and SA crops
Price of % of protein in meal

Cost by % protein of rapemeal (34%)

Cost by % of protein soymeal (48%)

£ / tonne

£10.27

£8.26

05 Jul 2019
05 Sep 2019
05 Nov 2019
05 Jan 2020
05 Mar 2020
05 May 2020
05 Jul 2020
05 Sep 2020
05 Nov 2020
05 Jan 2021
05 Mar 2021
05 May 2021
05 Jul 2021
05 Sep 2021
05 Nov 2021
05 Jan 2022
05 Mar 2022
05 May 2022
05 Jul 2022
Where now?

**Rapeseed**

- Short term, rapeseed shadows soyabean prices down
- Prospect of large Canadian crop
- Long term, S&D remains tight but recession could alter this if demand eases

**Soyabean**

- US crop prospects look favourable
- Longer term large South American crops are forecasted
- Recessional fears playing into reduced demand

NB – Price indicator based on current market dynamics.
Forage
Grass growth for forage

- Prolonged dry weather has affected overall forage availability
- Early silage cuts had good quantity and decent (if variable) quality
- Some concerns about later cuts and early feeding of silage
- For early August, “The average for the country has been distorted by fewer grass growth readings from the dry areas, says Piers Badnell, LIC consultant. Where rain has come, it is a good season.”

https://ahdb.org.uk/knowledge-library/forage-for-knowledge
Summer dryness shows in grass quality measures

**Dry Matter (%)**
- 2020
- 2021
- 2022

**Crude Protein (%)**
- 2020
- 2021
- 2022

**Water Soluble Carbohydrate (%)**
- 2020
- 2021
- 2022

**Metabolisable Energy (MJ/kg DM)**
- 2020
- 2021
- 2022

Source: Grasscheck GB
Feed market sentiments

- Forage challenges are mixed – NW had okay rainfall but E and SW struggling
- Dry weather means likely feeding silage sooner and for longer
- Silage quality is variable – some measures good, some bad
- Some reports of maize and wholecrop quality being sub-optimal
- Volatility has required reformulation of compound feed products (while maintaining nutrition standards)
- Feedback confirmed that situation is highly variable based on regions and between different farms
Costs & Yields
Purchased feed costs remain high

- Purchased feed costs only – cost of forage not accounted for
- Prices have come off peak but remain high
- June-22 costs were over 30% up on June-21

Source: Kingshay, Promar

https://ahdb.org.uk/dairy/promar-milkminder-dairy-costings
https://ahdb.org.uk/dairy/kingshay-dairy-costings
If only concentrate costs considered, we have generally avoided the contraction zone.

But, concentrate feed prices are only one element of rising costs – does not take into consideration fuel, fertiliser or increased cost of forage.

This suggests it’s the impact of other costs affecting milk production.
Other costs

- Feed costs not the only consideration
- Energy, labour, fertilisers etc all costing more
- Latest Agricultural Price Index data shows steep increases in all commodities since February

Fertiliser prices

- N based fertilisers prices eased off slightly in spring but are picking up again.
- Recent announcements from CF industries could lead to further increases.

Source: AHDB

https://ahdb.org.uk/GB-fertiliser-prices
Are milk prices covering rising costs?

- Indexes suggest milk prices have kept up with costs so far in 2022
- However, farmers may still have a financial hangover from Q4 2021
- Balance likely to see renewed pressure over autumn/winter
Impact on yields

- Notable drop-off from July 2021
- Prior to this yield drop-off, we had been assuming +2.3% annual growth in yields
- Now assumed -0.5% in June forecast

Source: AHDB
Yield forecast

- Historically yields were growing by 1.5% and then 2.3% year-on-year
- Yields have been low since July 2021
- Lower yields are now expected for the rest of the season
- Some recovery expected next season but against the lower comparable
Milk composition

Average UK butterfat content

Average UK protein content

Source: Defra

https://ahdb.org.uk/dairy/uk-milk-composition
Latest milk forecast
GB milk production – June forecast 2022/23

- June Forecast predicted 2022/23 would produce 12.23bn litres, down 1% on 21/22
- This is our “baseline” scenario
- Actuals have roughly followed forecast since
- Spring 2023 was projected to be slightly improved on ‘22 but still behind ‘21

Milk forecast scenarios

- Worsening farm finances could lead to further yield reductions and/or destocking

### Scenarios

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Retention rate</th>
<th>Yield growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>-0.5%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Low impact</td>
<td>-0.5%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Medium impact</td>
<td>-1.0%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>High impact</td>
<td>-1.0%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Very high impact</td>
<td>-2.0%</td>
<td>-2.0%</td>
</tr>
</tbody>
</table>

Source: AHDB

### GB milk production forecast scenarios

Source: AHDB forecasts

https://ahdb.org.uk/dairy-market-outlook
For the latest market news and up-to-date price reports, head to the Beef and Lamb market pages. Or subscribe to Cattle and Sheep Weekly for the best info straight to your inbox.

The website has a wealth of resources available from our markets homepage including a daily update on grain markets. The supply and demand section is a key resource for the market whilst the latest surveys detail planting and variety trends.

The Dairy markets homepage will signpost you to the industry data, analysis and insights from the dairy sector to help inform your business decisions. Our industry experts will guide you through the market movements and provide a clear, impartial view on what it all means.

The latest pig prices, and industry essential trade data, are the cornerstones of the Pork market website pages. There is also the latest analysis and insight to provide you with a clear and impartial view.

Our trade and policy resources focus on the future changes in domestic policy and trading relationships to help farmers and growers explore how these will affect their business. There is also a dedicated Consumer and Retail Insight team who look at the needs of the modern consumer as well as their attitudes towards cooking, buying and eating food.
‘Inspiring our farmers, growers and industry to succeed in a rapidly changing world’