UK sheep outlook

April 2019

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KEY POINTS
- Breeding flock contracting
- 2019 lamb crop forecast at 16.5m head
- Imports to remain lower
- Exports to be affected by lower production
- Prices currently at around 5 year average
- Weather and Brexit the biggest influencers

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Key 2019 Stats
- Breeding flock: 14.1m head
- Lamb crop: 16.5m head
- Lamb slaughterings: 12.6m head
- Ewe slaughterings: 1.7m head

All figures are forecasts and subject to revision. Year-on-year changes are shown.
Current market situation

Quarter 1 highlights

Prices

Both deadweight and liveweight lamb prices started 2019 above the previous year’s level, by 21p and 11p respectively. This premium has not lasted and overall for the quarter, the average price is lower than it was last year. This is largely due to record breaking high prices recorded last year, with the later timing of Easter and Brexit uncertainty bringing added pressure this year. The price for most of the year so far has been at or close to the five year average.

Production

Total production for quarter one stands at 71,000 tonnes, which is steady on year earlier levels, according to Defra data. However, what has changed is the mix of product, with an increase of 10% in cull kills to 418,000 head. Meanwhile the number of lambs coming forwards is down 7%, to 2.9 million head.

The effect on production of the rise in the number of ewes coming forwards has been compounded by an increase in average carcase weights, especially during March. The increase in numbers and weights supports reports that there has been as increase in the number of empty ewes this year, which are now being sent forwards having been fed as if they were in-lamb.

Estimated lamb slaughterings from the 2018 lamb crop are sitting 6% lower than this point last year which is not a surprise given the reduction in the 2018 lamb crop by an estimated 990,000 head to 17.2million head.

Trade

Trade data was not available for the whole first quarter of 2019 at the time of writing, so considering the period December – February UK imports of sheep meat have plummeted. Shipments fell 12% year-on-year to 16,600 tonnes. The value of imports was also down 11%, at £82 million. Last year recorded the lowest import volumes on record, so with this start to the year could we see volumes fall lower still? Retail demand for sheep meat is weak and this could affect the future market in the UK.

Some of this fall in imports can be attributed to a reduction from New Zealand, falling 19% to 9,500 tonnes. Around a third of imports from New Zealand are leg cuts, which are important in balancing the UK sheep meat market.
There is some divergence of trends though within this three month period, as during December there were some sharp year-on-year rises, and some significant declines during January and February. For example shipments from New Zealand increased 10% during December, yet declined by around a third during January and February.

UK exports of sheep meat are closely correlated to production. Exports were down 9% year-on-year in December to February to 22,100 tonnes. This was led by reductions in exports in December and January and although February’s exports were higher, they were not enough to mitigate the previous two months. This trend reflects shipments to France, the UK’s biggest export market. In contrast, exports to Germany and the Netherlands were higher than last year across the first two months of 2019.

The ‘flexible extension’ to Brexit until October alleviates supply concerns from our EU buyers in the short term. This may support the export market, and farmgate prices, in the coming weeks.

Global situation

Prices on the global sheep meat market have continued to trend above historic normal levels, with farmgate prices in both New Zealand and Australia currently trending around 70p above their respective five year averages. Prices have now been trending at this higher level for just over two years, with a tightening of supply in New Zealand and Australia coupled with an increase in demand from China driving much of the price rises. Due to the UK market dynamics, UK prices have not reflected the rises down under, although have had some support. Both New Zealand and Australia are forecasting a tightening in supply over the coming year, as they work to rebuild flock sizes after the drought. The Ministry of Primary Industries (MPI) in New Zealand is forecasting the global price of sheep meat to remain buoyant over the coming years.

During 2018 there was a sharp rise in volumes of sheep meat coming from New Zealand and Australia onto the global market, however much of this was mutton.

During 2018, Australia continued to almost fill its EU sheep meat quota, whereas New Zealand did not fully utilise its allocation. It should be noted that there is a vast size difference in the quotas.
Outlook

Flock numbers

Breeding flock

At the end of 2018 the UK breeding flock was pegged at 14 million head, according to the Defra December census. This is a year-on-year decline of 4% (600,000 head), significantly lower than AHDB had previously forecast. Such a sharp change is unusual, and has not been seen since the removal of headage payments over 10 years ago. The breeding flock is now at its smallest since 2010, the year in which the national flock was at its record lowest. Looking forwards, it is forecast for the growth period experienced since the start of this decade to be over, and for some further small reductions to be recorded in the coming years.

Lamb crop - 2018

In December, the 2018 lamb crop was confirmed at 17.2 million head, which was inline with previous AHDB forecasts. In January, AHDB pegged the number of old season lambs to be slaughtered between January and May this year at just under 4 million head, a 6% reduction on-the-year. During quarter one, a few more old season lambs came forwards than expected, therefore a downwards adjustment has been made to the number available to come forwards during April and May.

Lamb crop - 2019

The 2019 lamb crop is now forecast to be 16.5 million head, reflecting a smaller breeding flock but some small improvements in lamb rear rates. Lamb rear rates are not expected to fully recover, as scanning rates were reported to be poor with average ewe condition at tupping less than ideal. Weather has a huge impact on lamb survival, and while potentially expensive this year in terms of input costs, the weather was considerably better than the snow of last year. This is likely to offer some support to rear rates.

Industry reports have suggested not only an increase in the number of empty ewes this year, but also fewer ewes having twins. With the weather being fair through most of winter, and therefore the ewe pregnancy, the birth weight of lambs is reported to have increased.

Numbers available for kill

Lambs

The number of clean sheep (both old season and new season lambs) killed in quarter one of 2019 stood at 2.9 million head, a 7% year-on-year decline. Quarter two slaughterings last year were subdued, largely due to the new season lambs having been knocked back at lambing. This year, with the weather more favourable and a reported increase in the birth weight of lambs, it is presumed supply will return to a more normal seasonal pattern, hence why there is a
significant increase in quarter two kill numbers year-on-year. Overall, this means a rise of around 5% in numbers slaughtered. Much of this rise is expected to be recorded in April, with May and June kill numbers forecast to be steady or even down slightly on-the-year.

During the latter half of the year, numbers are expected to record year-on-year declines, reflecting the smaller size of the lamb crop. During quarter three, 3.3 million clean sheep are expected to come forwards, followed by 3.6 million in quarter four.

Overall from the 2018 lamb crop approximately 12.8 million head are expected to be killed. From the 2019 lamb crop it is forecast that approximately 12.3 million will come forwards. Without doubt the largest effect on the number of lambs coming forwards from the 2019 lamb crop will be Brexit. At the time of writing the situation is still somewhat up in the air, with an extension to the UK’s membership to the EU and negotiations extended till 31 October 2019. It is expected that the number of lambs coming forwards would increase sharply if a no-deal Brexit is announced.

**Adult sheep**

During quarter one adult sheep kill was exceptionally high, as were carcase weights. The increase in numbers can largely be attributed to an increase in the number of empty ewes this year, with rising carcases weights caused by these ewes being fed as if they were pregnant. Despite the flock having already contracted significantly, adult sheep slaughter is expected to be higher this year. The flock is reported to be older on average, which supports other reports that an increased number of ewe lambs came forwards last year.

**Trade**

**Imports**

Imports are forecast to remain at a subdued level, driven by on-going high global prices and continued tight supply in New Zealand and Australia. In 2018, UK imports of sheep meat stood at 91,800 tonnes cwe, down 3% on 2017 levels and the lowest on record. 2019 imports are currently forecast to decline 8% year-on-year.

Price levels on the global market continue to be elevated, although marginally below year earlier levels. During March and April, the GB deadweight OSL SQQ typically trends at a premium of around £2/kg over New Zealand farmgate prices. This year the premium is nearer to £1 and has been as low as 60p in recent weeks. There is a correlation between farmgate prices and export prices, with the Ministry of Primary Industries New Zealand forecasting for the New Zealand export price to continue to be higher over the coming years.

**Exports**

Export volumes will be influenced by Brexit. If market access and trade negotiations allow trade to continue to flow with little additional friction, just under a third of domestic production is forecast to be exported. Should there be barriers, either tariffs, non-tariff barriers, or additional friction such as additional border checks, then export volumes are likely to fall.
Long term

The long term element of this forecast assumes there is little change to market conditions post-Brexit.

Over the next few years, it is expected that the breeding flock will contract a little further, but with some small growth in future lamb crops compared to this year. A lack of growth/recovery in the breeding flock is expected due to ongoing uncertainty surrounding Brexit which makes it less attractive to invest heavily in increasing ewe numbers. Another contributing factor to the size of the breeding flock is the smaller size of recent lamb crops, which means farmers have less choice in terms of available ewe lambs to be retained for breeding and also a need for balancing cash flow by sending animals forwards. During 2020, it is expected that the lamb rear rate will stand slightly below the five year average, reflecting reports of another dry summer this year, while the 2021 lamb rear rate currently is forecast to return to the five year average. Overall, through the time period of the forecast, the number of lambs available for slaughter from each lamb crop is forecast to be below 12.5 million. Over the past five years this figure has been nearer to 13 million.

With all that in mind, typically the UK exports the equivalent of over 3.5 million lambs and therefore any decline in the number of lambs available for slaughter could be over shadowed by these lamb carcases coming to the UK domestic market if there is a no-deal Brexit. In addition to the 3.5 million lamb carcases, other sheep meat products are also currently exported to the EU.

In February 2019 AHDB published a report into the possible impact of Brexit on sheep meat production, click here to read the full report.

Conclusion

Falling consumption of sheep meat is not a new trend in the UK, and reflecting this, total supplies available for consumption in the UK are forecast to continue to decline again in 2019.

Ewe condition at tupping and the weather at lambing will have a key effect on the size of any year’s lamb crop. There is a clear correlation between the size of the lamb crop, number of lambs slaughtered and export volumes. Despite this, the biggest risk to the AHDB export forecast is Brexit, as UK exports to the EU could potentially face tariffs. Changes in import volumes are likely to be affected by both the available supplies in New Zealand and also changes in demand from China.

Summary table

*Actual and forecast supplies of sheep meat in the UK*

<table>
<thead>
<tr>
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<th>2018</th>
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<th>2020</th>
<th>2021</th>
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<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Year</td>
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<td>26.7</td>
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<td>70.2</td>
<td>74.2</td>
<td>73.8</td>
<td>293.3</td>
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Source: Defra, IHS Maritime & Trade – Global Trade Atlas®, HMRC
Figures in bold are forecasts. All figures subject to revision. Totals may not sum due to rounding.
Weather update

Summary of 2018

The UK’s weather over the last year will be remembered in a tale of two (extreme) halves. Winter appeared to begin as normal, with average temperatures, rainfall and sunshine. However, as winter turned to spring, the country was hit with widespread snow and well below-average temperatures. March 2018 recorded temperatures of less than -10°C in parts of the country, helping make the month the coldest since 2013.

Cattle and sheep farming in particular, suffered as a result. The cold weather made lambing and spring calving difficult, while delaying turnout of herds across the country. Due to the harsh conditions on-farm mortality was higher, either from the cold or from the onset of illnesses like pneumonia. The extended housing of livestock away from the harsh conditions meant that feed and straw stocks were greatly depleted, while becoming more expensive to buy-in.

As the country thawed out moving into the summer months, so began the second spell of weather extremes. Warmer than average temperatures and seriously low rainfall in much of the country resulted in a nationwide drought. This was especially true of June, in which the UK only received 48% of average rainfall for the month. The hot weather caused concerns over animal heat stress and fertility, especially for pigs. Sheep however, benefitted from reduced cases of liver fluke.

The largest concern of the summer however, was forage availability. Preserved forage stocks were further eroded as grass failed to grow, forcing many to feed rations long into the summer. To conserve feed, many producers looked to send more of their livestock to slaughter. However, demand from processors was low, meaning that many beasts were finished on-farm. Forage production data released later in the year by the Andersons Centre confirmed the worry over feed supplies. GB grass silage production was estimated to be down around 10% across surveyed farms going into the winter.

The nation’s weather remained unsettled as the year rolled on. Autumn contained several stormy episodes, causing high winds in the north of the country and heavy rain and flooding in western
areas. With an El Nino weather front present in the tropical pacific at the time, the UK’s winter was forecast to be mild. And it was. Despite a few cold snaps at the end of January, the average temperature for the season was 5.2°C; 1.4°C above the long-term average. Rainfall levels over the winter only reached 77% of the long-term average for the UK as a whole.

**Looking forwards**

Spring 2019 got off to a warm and wet start, with this March being the fifth wettest on Met Office records for the UK as a whole. Lambing has been reportedly slow to start for some, with accounts of low scanning rates blamed on last year’s dry summer and the poor-quality grass, which lowered fertility levels. In an attempt to combat this, reports suggest that some farmers pushed back tupping in order to get ewes in ‘fitter’ condition. Conditions for lambing could be described as fair overall, which may support the survival of lambs that are born.

Looking to the months ahead, forecasts from the European Commission suggest that the UK’s weather in spring and summer is likely to be warmer and drier than average. The US Government, who forecast that El Nino conditions are likely to continue through the Northern Hemisphere spring and summer, also suggest this might be the case.

**Weather outlook for the EU in June 2019, produced by the European Centre for Medium-Range Weather Forecasts**

### Grass growth

This season’s grass growth initially looked promising, with growth rates tracking above the five-year average. However a lack of rainfall and cold winds has hit growth rates, resulting in a drop off during April. Though daily growth rates are increasing, grass is reportedly not taking-off as usual this spring.

The expectations of a warmer and drier than average spring and summer are likely to impact grass quality. Warmer and drier weather will likely increase the dry matter content of grass, which could impact dry matter intakes.

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Input costs

Overall the Defra Agricultural Price Index (API) for inputs has been steadily rising for the past two years. Meanwhile farmgate prices for livestock are largely below year earlier levels, suggesting cash flow is tighter and profits squeezed. Naturally this will vary from farm to farm depending upon management systems and risk management strategies. Many of the largest cost rises have been recorded in feed, closely followed by fertiliser costs and veterinary services. The rise in fertiliser costs recorded in the API correlates to rises recorded in AHDB fertiliser price data.

Hay and Straw

During the past winter housing period straw prices have continued to trend above historic normal levels, although there was a significant reduction year-on-year, according to data from the British Hay & Straw Merchants’ Association. What has been interesting, is the divergence in price levels for wheat and barley straw. In part the divergence could be as barley straw tends to be preferred over wheat straw as a forage source, potentially increasing the demand. Due to feed levels remaining elevated through the past housing period, this may have led more farmers to feeding straw. In contrast to straw prices, hay prices have continued to record increases, which again could have added some reason to why farmers are potentially looking to straw as a feed stuff.

Fuel

Red diesel prices have continued to trend higher than in the past few years, although did record some month-on-month declines from the winter, according to Defra data. Naturally the highest time for red diesel usage tends to be during the summer rather than the winter, when more field work takes place although some tractor work feeding livestock will take place during the housing period. Red diesel prices are still marginally below the highs of six/seven years ago.
Fertiliser

Fertiliser prices have largely been trending higher than this time last year, however have recorded some month-on-month easing during January and February, according to AHDB data. Nitrogen prices recorded significant falls in December and January, with some levelling in February for domestically produced nitrogen. Seasonally nitrogen demand increases during March and April and therefore this could have added some upwards pressure to prices. Other fertilisers, including Diammonium Phosphate (DAP) and Triple Super Phosphate (TSP), have held firm since last summer, although are at a higher price year-on-year.

Feed

- **UK Ex-farm price (£/t)**
  - **Feed wheat**
    - 161.0
    - Date at March 2019
    - 12% (Change)
  - **Feed barley**
    - 133.2
    - Date at March 2019
    - -2% (Change)
- **UK Feed ingredient price (£/t)**
  - **Soyabean meal**
    - 290.8
    - Date at March 2019
    - -18% (Change)
  - **Rapeseed meal**
    - 192.2
    - Date at March 2019
    - -4% (Change)

**Feed market drivers**

- **Wheat**
  - Large global stocks of old crop
  - Largest UK planted area since 2014
  - New global crop developing well
- **Barley**
  - Larger 2019 UK crop expected
  - Lack of export demand
  - Lower domestic demand
- **Soyabean**
  - Large US stocks
  - Fresh south American supplies
  - Impact of African swine fever in China
- **Rapeseed**
  - UK and EU planted area down
  - Domestic challenges with pests and disease
  - Large Canadian canola stocks
How does AHDB produce the sheep forecast?

Twice a year AHDB produces forecasts for the sheep, cattle and pig sectors. These are released in April and October, and follow large population data releases from Defra. In between these outlooks, AHDB conducts reviews of each forecast. This is done to update each forecast, and evaluate how they are performing. Small tweaks may be made based upon new, or revisions in historic Defra slaughtering data, changing industry conditions and new market intelligence.

What data is available?

Each month Defra releases monthly slaughtering figures for the UK and sometimes revises previous figures. Large revisions are unusual, but can go back many months.

Twice a year, Defra (along with the devolved governments) conducts population surveys. The June survey results are provisionally released in October with a final figures being supplied in December. In December, a census is conducted, and the results from this are released the following spring. This data is often revised 12 months later. For the purpose of the sheep forecast, the size of the breeding flock is taken from the December census.

The June survey data forms the basis of the lamb crop estimate, and livestock auction market throughputs allow AHDB to estimate the number of new season lambs slaughtered prior to the June survey being conducted. Combining these figures together gives an estimate of the size of the lamb crop.

Sometimes Defra do make revisions to historic data. Of course this does affect the accuracy of the forecast, although no better source of data exists, and in any case conducting a comprehensive survey of the UK livestock population is understandably a substantial undertaking.

How are slaughterings forecast?

Once a lamb crop figure is established, AHDB takes this number and removes those lambs it expects to be retained as breeding replacements. This is done based upon historic ratios and importantly also on information gathered as the season progresses. The remaining lambs are then forecast for slaughter based upon historic seasonal patterns, again using the monthly Defra slaughtering data, with some adjustments made based upon finishing conditions in any one year, trade and other relevant information.

Is the December census accurate?

The census is conducted by Defra, but AHDB uses the data regularly, more for the trend than the number of sheep itself. There is a significant correlation between the size of the UK breeding flock as recorded on the census in December of one year, and the number of UK lambs slaughtered from the following lamb crop.

Correlation between size of UK breeding flock and number of lambs slaughtered from the following lamb crop, 2004 - 2017

Source: Defra, AHDB

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