

Overview – Week 4- WE 31 July

This Harvest Report has been prepared by ADAS for AHDB Cereals & Oilseeds, using data supplied by regional reporters (mostly independent agronomists). The approach used is consistent with previous years, allowing comparison of data and provides a snapshot of harvest progress throughout the harvest season.

The WE 31/07 was a week of two halves, starting fine and dry, with thunderstorms and heavy showers then affecting most of the country over the weekend, which caused a brief pause in harvest proceedings. Despite the recent rainfall, over 500kha of combinable crops were harvested in the last week, with winter barley harvest drawing to a close in all regions, winter oilseed rape harvest well progressed and a good start made on the harvest of winter wheat. Harvest of winter oats is also well progressed, with small areas of spring crops also starting to be cut. To date, just over 36% of the UK cereal and oilseed area has been harvested, with this year's harvest remaining the earliest harvest in the last five years.

Weather

GB saw fine dry weather across all regions during the first half of WE 31/07, with the AHDB weather hub showing temperatures of over 30°C on several days, reaching 34°C in the South East on 26/07. However, from 27/07 onwards, a band of heavy rain and thunderstorms swept across the country, bringing heavy downpours and lower temperatures. This was accompanied by strong winds. The South East, Eastern and East Midland regions also saw more rainfall overnight on 31/07. According to the AHDB weather hub, mean rainfall for WE 31/07 was 25mm, with 14mm falling in the Eastern region, which was the first notable rainfall in several months for this area.

Winter Wheat

GB winter wheat harvest is 25% complete. Harvest of winter wheat started in earnest during the last week with just over 400kha of crops harvested and is currently slightly ahead of the last five harvests. In 2014, harvest was about 20% complete by the same stage, but in each of the other four years harvest had yet to start by the end of July. The largest area of wheat harvested has been in the Eastern region where just over 200kha were cut in the last week (regional progress 47% regional area). In the South East and South West about 45% of the regional area has been harvested, accounting for 90kha and 70kha respectively. Harvest was just starting in the East Midlands as the rain hit, with just over 10kha harvested to date. Occasional fields have been harvested further north.

Yields

The GB 5 year average yield for wheat is 8.2t/ha, following some very good harvests in 2014 and 2015 and a decent harvest in 2017. The early yield figures for 2018 indicate that yields are 5-8% below the five year average. These early yield estimates are based on early harvested varieties in the south and east of England, and are therefore only an indication of where the final yields will end up so should be treated with some caution. The current yield estimate from these two regions is 7.6-7.8t/ha.

Overall, the best yields have been delivered on heavier land, where more moisture has been retained. Milling wheats also appear to be yielding better than feed wheats, especially where grown on heavier soils. However, these good yields off the heavy land are balanced by poorer yields from light land. In some extreme cases, on very light land and where there has been an almost total lack of rainfall over the last two months, yields of as low as 2.5t/ha have been reported.

Quality

The quality specification for high quality bread wheat (group 1) is specific weight \geq 76kg/hl, Hagberg falling number (HFN) \geq 250 seconds, protein \geq 13%. The requirements for medium quality bread wheat (group 1 & 2) are specific weight \geq 74kg/hl, HFN \geq 180 seconds and protein \geq 11.5%. To date, milling wheats are mostly making specification.

- Specific weight – typically 76kg/hl (74-78kg/hl). Specific weights are variable with light land crops dropping to 70kg/hl, whilst some crops on heavier land have had specific weight up to 80kg/hl.
- Hagberg Falling Number – typically HFNs are >300 seconds.
- Grain protein – typically 13-13.5%, although on occasional crops there have been reports of up to 14.5%.
- Moisture – minimal drying required, except to manage very small areas of grain from tramlines or very sheltered areas.

The dry conditions at harvest have meant that grain is coming in at moistures below 15%, with occasional moistures as low as 12% on the hottest days. This has meant that driers have not been needed, except in situations where they can be utilised to blow cool air through hot grain to help the cooling process.

Winter Barley

Harvest of winter barley is 96% complete and was completed WE 31/07 in most regions, with just small areas left to harvest in the more northern parts of England as well as in Scotland and Wales. As harvest drew to a close rate of progress slowed with just under 99kha harvested in WE 31/07 compared to 155kha harvested in WE 24/07.

This puts harvest progress well ahead of that achieved at the same point in time in any of the last five years. The early harvest of 2014 saw just under 80% of the winter barley area harvested by the end of July. In 2015 and 2016 harvest to this point in July was between 30-35% complete.

Yields

The current GB yield estimate for winter barley is 6.7-6.9t/ha, which is close to, or slightly below the GB five year average of 6.9t/ha. This trend for slightly below average yields is not reflected in the 2018 AHDB recommended list trial harvest results for winter barley, which have seen [above average yields](#). The yield picture on winter barley is mixed across the country. Yields in the South East and Eastern regions are slightly above average, with the best yields occurring on heavier land, due to better moisture retention - with yields of 8.0t/ha common on conventional varieties and 9.0t/ha on hybrid varieties, rising to 11t/ha on the best crops. In these regions, some areas of light land have delivered yields of about 6.0t/ha, as most of the yield building had already occurred by the time drought set in. However further north and west there are a higher proportion of below average yields, especially on lighter land crops, where yields as low as 5.0t/ha have been reported.

Quality

The majority of malting varieties are meeting specification, and quality overall is good.

- Specific weight – averaging 65kg/hl (regional range 61-68kg/hl). Specific weights have been variable this year, with reports of low specific weights occurring on farms with very light land (especially in the Eastern region), on the heavier land specific weights are better, but they still tend to be slightly below normal for the farm. There have been occasional reports of specific weights p to 70kg/hl.
- Grain nitrogen (malting varieties) – average 1.6%, regional range from 1.4-1.8%. Grain nitrogen levels tend to be lower in the north (1.4-1.5%) and higher in the south 1.6-1.8%.
- Screenings – typical reports are around 2%-10%. Screening levels are within tolerance, although concerns over potential quality issues in spring barley have meant some merchants are adjusting their tolerances to make the most of the winter barley crop that is available.
- Moisture – minimal drying required, except to manage very small areas of grain from tramlines or very sheltered areas.
- Germination – typically around 98%.

Spring Barley

A start has been made to spring barley harvest with 2% of the GB area harvested to date. Spring barley was planted in two main planting window in 2018. There were some very early planted crops that were drilled in February during a brief lull in the

weather, then planting ground to a halt as a result of persistent rain and snow making fields inaccessible. This resulted in a large proportion of the spring barley being drilled late, often into May. This difference in planting timing means that spring barley crops vary greatly in their maturity. The earliest planted crops on the lightest land were ready for harvest in WE 31/07, whilst the later planted crops remain green.

Yields and Quality

Too early for representative yield and quality data. The earliest harvested crops were often on the lighter land and therefore yields have been impacted by the recent dry conditions.

Oats

Harvest of oats is 40% complete, with just under 50kha cut during WE 31/07. It is predominantly winter varieties that have been harvested at this stage, although a start was made on spring varieties in the south. Harvest progress is a little ahead of 2014, which is the earliest recent harvest (last 5 years). In 2015-17 harvest of oats did not start until the first week of August.

At a regional level, harvest is almost complete in the South West, whilst 75% of oats have been harvested in the South East, 60% in the West Midlands and 56% in the Eastern region. Small areas have been harvested in the East Midlands and Wales, with harvest yet to start elsewhere.

Yield

The 5 year average yield for oats is 5.7t/ha, including both winter and spring varieties. Initial reports based on predominantly winter varieties are showing yields that are slightly below the farm average. Regional average winter oat yields currently range from 5.6-6.6t/ha, so when combined with spring oat yields it is expected that the national yield will be below average.

Quality

Early indications are that specific weights are in the region of 51-53kg/hl.

Winter oilseed rape

GB Winter oilseed rape harvest is 80% complete. Steady progress was made in the first half of WE 31/07 with 150kha harvested until wet conditions developed from 27/07 onwards and brought a halt to harvest. Harvest is complete in the South West and drawing to a close in the Midlands, Eastern region and South East (90% complete). Further north, harvest is underway with half the winter oilseed rape area harvested in Yorkshire & Humberside, whilst elsewhere, just occasional crops have

been harvested. Swathing has taken place in Scotland, with an expectation that harvest will occur next week, given suitable weather conditions.

As with last week, in some cases it has been necessary to harvest at night in an attempt to avoid pod shattering due to the very dry conditions. There are also concerns over seed moisture levels, which if harvested in the heat of the day have been coming in very low. The recent rainfall will have raised moisture levels, in the small numbers of crops that are left to harvest. The level of lodging remains low across the country, although up to 5% of crops are affected by lodging in the West Midlands.

Yield

The estimated current average yield for winter oilseed rape is 3.2-3.4t/ha. This is c.3-8% down on the GB five year average of 3.5t/ha. Yields are highly variable with light land yields dropping as low as 1.5-2.0t/ha, although there are light land crops yielding up to 4.0t/ha. On heavier land the yields tend to range from 3.5-5.0t/ha. Cooler coastal areas have tended to yield more consistently across the soil types than the warmer inland areas.

Quality

The high temperatures and low moisture have caused much of the oilseed rape area to ripen rapidly, leading to reports of red or brown seed. Likewise, there are still reports of more green seed being harvested, again due to rapid ripening, often on light land.

- Oil content – occasional reports of low oil contents, but most crops are averaging 44-45%.
- Specific weight – no issues reported.
- Moisture - very dry conditions mean moisture levels are low and no drying has been necessary in most cases. Average moisture levels are around 7-8%.