Overview

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. All harvest reporting weeks run from Wednesday to Tuesday – with data reported for the week ending on a Tuesday e.g. WE13 August. A full data dashboard of progress is available here. This report focuses on the fortnight period from 31 July to 13 August.

Harvest progress of the two weeks to 13 August was steady with just over 1.1Mha harvested over the two week period, bringing the GB cereal and oilseed harvest to 43% complete. During WE6 August harvest of winter barley and WOSR was drawing to a close in the south, with a start being made on winter wheat. Further north a start was made on winter barley and WOSR. By WE13 August harvest of winter wheat had started in most regions and was progressing well in the south, harvest of winter barley and WOSR was nearing completion in the Midlands and a start had been made on winter oats and spring barley. Harvest progress to WE13 August can be summarised as:

- **Wheat** – 27% complete, mostly in the East of England and South East although a start has been made in most regions.
- **Winter barley** – 94% complete, small areas left to harvest in northern England and Scotland.
- **Spring barley** – 25% complete, significant areas harvested in East of England, South East and South West, little harvested in northern regions.
- **Oats** – 17% complete – start made to winter oat harvest in southern England and the Midlands.
- **Winter oilseed rape** – 86% complete, harvest is complete in southern England and the Midlands, small areas left to harvest in northern England and Scotland.

Harvest progress was hampered by unsettled weather throughout much of the period. Showers halted harvest on a number of occasions. However, the scattered and brief nature of the showers, and accompanying stiff breezes meant that crops tended to dry quickly, allowing harvest to resume without excessive delays. Parts of the country such as Yorkshire and the North West experienced more intensive storms during the period. There was localised flooding in parts of Yorkshire as a result of the intensity of the rain in some of the storms. Rarely did flooding affect arable land, but the heavy rain did lead to an increase in the level of lodging observed. The total GB area of wheat lodged is currently at c.3%, lodging is at c.4% for winter barley and c.4% of oats. This has caused some issues for farmers where crops are laid completely flat and have made harvesting difficult.

Early indications, based on early maturing varieties from the south are that wheat yields are above average. However, as more crops come to harvest a clearer picture will be gained. Crops harvested to date are meeting quality specifications, although protein contents in wheat are on the low side. Winter barley is averaging 7.1-7.4t/ha which is slightly above the 5 year average of 7.0t/ha. Winter barley quality is acceptable with nitrogen contents ranging from 1.5-1.7%. Spring barley yields are above average at this early stage in harvest. Yields for winter oats are close to average, but until spring oat yields are returned estimates for oats as a whole are challenging.

There is some uncertainty over the final area of WOSR harvested as there have been reports of crop losses right through until harvest. This increases the uncertainty around the national average yield. Current estimates put yields at 3.3-3.6t/ha close to the 5 year average of 3.5t/ha. Oil content for winter oilseed rape remains lower than recent years, averaging 44%.
Wheat

Harvest update

An estimated 27% of GB wheat was harvested by WE13 August, equivalent to approximately 490Kha. Wheat harvest started in WE6 August, mostly in the East of England, although small areas were harvested in other southern regions. Harvest started in earnest during WE13 August with a start made in most English regions and Wales. Progress is fairly average, slightly behind the early start made to harvest in 2018, but ahead of the later harvests in 2015, 2016 and 2017. It is mostly early maturing varieties such as Skyfall and Grafton that have been harvested to date, with the later maturing varieties now ripe in the East of England, but still a week or more away from ripeness further north.

Regional reports show harvest is most advanced in the East of England with over half of the area harvested, equivalent to just over 260Kha. In the South East and South West harvest is about 40% complete with a combined area harvested of just over 150Kha. Elsewhere harvest was only just getting started at the end of WE13 August with up to 15% of the area harvested in these regions.

An estimated 3% of the GB wheat area has been affected by lodging, with an increase in lodging reported as a result of heavy rainfall in recent weeks. The North West and West Midlands regions are reporting 6-12% of the crop area lodged. Grain shedding is a concern on a small proportion of crops where they are ripe and ready for harvest and then affected by heavy rain showers. Harvest of these crops is being prioritised during periods of dry weather to minimise yield impact.

Yields

As harvest has only just begun for wheat, yield estimates at this stage should be treated with caution. Early yields are based on early maturing varieties harvested in the South and East of England. Indications from these crops are that yields are good, with farmers reporting above average yields in most situations. Farm yields have ranged from 6.0-14.5t/ha. The East of England are reporting some particularly good yields, with the weekly average yield in the region at 9.9t/ha, and a good proportion of crops yielding over 10 t/ha. Early indications are that there is little difference in performance between first and second wheat crops, with both achieving good yields.

Milling varieties have yielded in the range of 6.0-11.5t/ha, whilst feed varieties have yielded up to 14.5t/ha, but more typically 7.0 to 12.0 t/ha.

Quality

Quality to date is based on early maturing varieties (predominantly milling varieties) harvested in the South West, South East and East of England. These early samples have modest specific weights, Hagbergs are within specification with all samples to date well over 250 seconds and protein contents are on the low side averaging just under 13%, with lower proteins associated with higher yielding crops.

Specific weight – Specific weights have been variable, with high specific weights on high yielding crops on heavy soils, and lower specific weights associated with those crops that were affected by a lack of moisture during grain fill. Range between 72-81kg/hl.

Hagberg Falling Number (HFN) – Limited data, but early indications are that HFN are typically around 300 seconds, but they are already showing signs of starting to drop.
Protein – Early reports show a range of 11.5-13.0%. Milling varieties are tending to average just under 13%.

Moisture – Moisture contents have varied throughout the day, with farmers tending to start harvest once moisteries have dropped to 18%. As harvest progresses, moisteries have tended to drop to 14% by the end of the day. This has resulted in about half the crops harvested in the last week needing some air blown through them to reduce moistures by 1-2% ready for storage.

Winter barley

Harvest update
An estimated 94% of GB winter barley was harvested by WE13 August. This is equivalent to an estimated 396Kha harvested to date, with 25Kha still left to harvest in northern regions. Harvest progress in 2019 is consistent with that of 2018, which was 93% completed by WE13 August.

Winter barley harvest is complete for the South East, South West and East of England. The Midlands and Yorkshire are nearing completion with 90-95% of the area harvested. Scotland is currently 85% complete. The main areas left to harvest are in the North East (7Kha) and Scotland (7Kha) with small areas left to harvest in Yorkshire, the West Midlands and Wales.

The heavy rain and high winds in WE6 August resulted in increased lodging of winter barley in northern regions with around 4% of the total GB area affected. There were some crops that were completely flattened making harvest difficult.

A high proportion of barley straw is baled each year, and baling progress has been hampered by the repeated heavy showers.

Yields
The current GB yield estimate for winter barley is 7.1-7.4t/ha compared to the 5 year average of 7.0t/ha.

All regions are reporting good yields, with some yields up by as much as 20%, although on average yields are 1-5% above the 5 year average. Lodging has not had a significant impact on national yields, although has had the occasional local impact. Farm yields to date range from 5.7t/ha to 12.0t/ha. Conventional 2 row malting varieties are tending to yield 7-8t/ha, with 6 row feed barley varieties typically yielding 8-9t/ha, whilst the hybrid varieties are yielding in the 9-12t/ha range. The poorest yields are reported on crops that have had harvest delayed and heads lost to brackling.

Crops grown on lighter land tended to yield about 1.5-2.0t/ha less than similar crops on heavier soils.

Quality
The majority of winter barley was harvested in the good weather at the start of the harvest period and as a result the quality of most grain samples is very good. Specific weights of some crops are a little on the low side, but still meeting specification. There are concerns over the quality of the small area of crops that remains to be harvested.

Specific weight – Average 65 kg/hl, typical range of 63-67kg/hl.

Grain nitrogen (malting varieties) – Average 1.6%, Ranging from 1.4-1.7%
Germination – Reports show germination levels reaching 99% in the north and 94%-98% in the South East with some merchants commenting that pre-germination had already started in some samples.

Screenings – Typical reports are around 3%, ranging from 1-5%.

Moisture – Moisture contents averaging at 15% with a small amount of drying required, usually 1-2% for crops that were harvested in showers. The early harvested winter barley all came in at moisture below 15%, however, in the last two weeks an increasing proportion of the crop has been harvested at slightly higher moisture. In Yorkshire moisture contents started at 16%, dropping through the day, resulting in an estimated 80% of grain needing at least some time in the drier. In parts of the Midlands where farmers were pushing to get barley harvested to protect quality, 10% of the area was harvested at moisture of 19-20%.

Spring Barley

Harvest update

An estimated 25% of GB spring barley was harvested by WE13 August, equivalent to approximately 180Kha.

Harvest started in WE6 August, with about 40Kha harvested in the East of England and parts of the south. By WE13 August a further 140Kha had been harvested. Harvest progress is ahead of recent years, with 17% of the area having been harvested at this stage in 2018, and less than 10% harvested at the same stage in the previous 3 years.

Yield

Early yield reports are based on a small sample of crops mostly from the South West and East of England. Early yields are tending to be close to or slightly above the farm average.

Yield reports from the earliest harvested crops are typically above the 5 year average of 5.6t/ha. Farm yields have ranged from 5.0-10.0t/ha. Malting varieties are yielding 5.0-9.0t/ha, whilst feed varieties have yielded up to 10.0t/ha. Crops on light land are typically yielding 2t/ha less than similar crops on heavy land.

Quality

With such a small area harvested there is very little data available, with bias towards the south and east of the UK. Data should be treated with caution at this stage of the season. Early indications show good specific weights and low screenings.

Specific weight – Ranges between 63-65kg/hl

Grain nitrogen (malting varieties) – Between 1.3-1.7%

Screenings – Estimate of 2-4%

Germination – Very few samples to report from.

Moisture – Ranging between 14-17%.
Oats

Harvest update
An estimated 17% of GB oats were harvested by WE13 August, equivalent to approximately 29Kha. This level of progress is ahead of most recent years, but behind the early harvest of 2018 where 57% of the area had been harvested by this point in time. Harvest of winter oats began in southern regions in WE6 August, and progressed steadily through WE13 August. Oat harvest is most advanced in the South West and East of England with 45-50% of the regional area harvested (about 10Kha each). Most other regions had made a start on winter oat harvest by the 13 August, with occasional crops having been harvested as far north as Scotland.

Lodging is present on headlands and overlaps on about 7% of the crop area, with up to 20% of oats in Scotland affected.

Yields
Early yield data is only available for winter oat varieties which tend to yield higher than spring oats. Data is also based on a relatively small area of crops harvested mostly in the South West and East of England. In these regions yields are close too or slightly below average for the farm. Farm yields to WE13 August ranged from 3.7-10.0t/ha. The poorest yields were reported on crops with high grass weed pressure (especially bromes).

Green straw and weed contamination have led to harvesting difficulties, with some crops requiring glyphosate treatment to remove green material in advance of harvest.

Quality
There is limited quality data available for oats yet, and that which is available is for winter varieties. There is a great deal of variability in specific weights, with good specific weights reported on crops from heavy land, whilst on lodged crops specific weights are lower.

Specific weight – Ranging between 50-58kg/hl, dropping as low as 47kg/hl on crops that suffered high lodging.

Moisture – Between 14-16%.

Winter oilseed rape

Harvest update
An estimated 86% of the GB winter oilseed rape (WOSR) area was harvest by WE13 August, equivalent to approximately 445Kha.

WOSR harvest is complete for much of southern and central England. The main areas left to harvest are in Yorkshire (30Kha), Scotland (21Kha) and the North East (13Kha), with just small areas left to harvest elsewhere. Harvest progress remains broadly in line with the early harvests of 2017 and 2018, and about a week ahead of the later harvest of 2015 and 2016.

Yields
Estimating oilseed rape yields, particularly in parts of the East of England and East Midlands has been challenging this year as there are a number of fields with partial or complete crop failures that have
been written off in the last few weeks before harvest. These areas are therefore included in the overall area of WOSR assessed for yield. Yields are highly variable due to a combination of poor establishment, cabbage stem flea beetle (CSFB) damage and failures in weed control. The current estimated yield for WOSR is 3.3-3.6t/ha, which is close to the 5 year average of 3.5t/ha.

Reported farm yields to date have varied widely; ranging between 1.2-5.2t/ha. There is even huge variability on farm, with the same variety on similar soil types showing 1t/ha yield differences, mostly due to pest damage. The lowest yields are attributed to damage from CSFB at various stages of crop development causing premature senescence and stunted growth. Some of the best yields have come from earlier drilled crops that had established well, with coastal regions yielding particularly well.

**Quality**

Reports from a number of regions indicate issues with pod shattering due to harvest delays caused by wet weather and low oil contents.

**Oil Content**- Between 40-47%, averaging 44%.

**Moisture**- Moisture contents range from 6-10%. Little drying required for those harvested in the dryer weather of WE6 August. Those that have been later harvested have benefited from the wind with many starting harvesting at 12% or below.

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