



AHDB



# AHDB Harvest Report

Report - 4

Week Ending – 27 August 2019

Prepared by ADAS



## 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. WE27 August. A full data dashboard of progress is available [here](#). This report focuses on the week between 20 August and 27 August.

To WE27 August 3.0Mha had been harvested, equivalent to 81% of the GB cereal and oilseed area. An estimated 1.2Mha of cereals and oilseeds were harvested in the WE27 August. This is the largest area cleared in a single week since ADAS records began in 2008. This high rate of clearance was facilitated by high combine capacity on farm, together with the fact that large areas of ripe wheat and spring barley were available to harvest in both the south and the north of GB. This also coincided with hot, settled weather across the whole country. This rate of progress brought harvest in line with recent early harvests. The main focus of harvesting activities in WE27 August were wheat and spring barley, with occasional winter barley and winter oilseed rape (WOSR) fields cleared to complete harvest of those crops. Where farms grew oats these were often prioritised due to high levels of lodging. Harvest progress to WE27 August can be summarised as:

- **Wheat** – 79% complete. Harvest of milling varieties now complete with some small areas left in northern regions, harvest is nearing completion in the southern regions.
- **Winter barley** – 100% complete. Good weather conditions allowed for the remaining areas in the north and Scotland to be harvested.
- **Spring barley** – 62% complete. All regions made good progress with spring barley in WE27 August.
- **Oats** – 69% complete. Considerable progress was made across all regions in WE27 August.
- **Winter oilseed rape** – 99% complete. There are small areas remaining in Scotland.

After a period of wet weather in WE20 August which brought harvest almost to a standstill, the dry settled conditions of WE27 August were welcomed by all regions. Temperatures over the weekend reached the low 30s (31-33°C) for most regions. High temperatures and light breezes rapidly dried crops that had been soaked the previous week, allowing harvest to resume across all regions.

Wheat yields continue to be good with above average yields reported in all regions. The current GB national wheat yield estimate is 8.8-9.0t/ha, showing an increase on the 5 year average of 8.3t/ha. The recent rainfall and delays to harvest impacted Hagberg Falling Numbers (HFN) on remaining milling wheat varieties. This is particularly the case in the west, where there are occasional reports of milling varieties falling below 150 seconds. Further east, HFNs are holding and remain around 300 seconds. To date protein levels average 12.7% and specific weights average about 74-76g/hl.

The GB national average winter barley yield is estimated at 7.4-7.6t/ha, which is above the 5 year average of 7.0t/ha. Little winter barley was left to harvest in WE27 August, however the small remaining areas in the north and Scotland were completed. Nitrogen content is averaging 1.6%.

The GB national average spring barley yield is estimated at 5.4-5.8t/ha, which is consistent with the 5 year average of 5.6t/ha.

The GB national average oats yield is estimated at 5.5-5.7t/ha, which is in line with the 5 year average of 5.6 t/ha. Final yields may be adjusted as more spring oats are harvested in the north.

The GB national average WOSR yield is 3.2-3.5t/ha, which is close to or slightly below the 5 year average of 3.5t/ha.

## Wheat

### Harvest update

An estimated 79% of GB wheat was harvested by WE27 August, equivalent to approximately 1.4Mha, with 875Kha harvested in the last week. This is the largest area of wheat harvested in a single week, since ADAS records began in 2008. The high rate of progress is a result of the delays from the previous week, aligning the peak wheat harvest in southern England with the main start of harvest in the north. Combine capacity on farms has increased in recent years and it was put to full use in the WE27 August. There is an estimated 380Kha left to harvest, mostly feed varieties with small patches of milling varieties remaining in the north.

Wheat harvest was the main focus for the majority of farms across all regions. The largest areas of wheat cut were in the East Midlands (just under 250Kha) and the East of England (just over 150Kha). Just over 100Kha were harvested in each of Yorkshire, West Midlands and the South East. A proper start was also made to wheat harvest in Northern England, Scotland and Wales during the week, with up to 30Kha harvested. The largest areas of crop left to harvest are in Scotland and Yorkshire – each with about 80Kha left to harvest.

An estimated 5% of the national wheat area was affected by lodging. In most cases this was restricted to overlaps and headlands, or slight leaning in the centre of fields, but there were occasional fields that were more severely affected. In the majority of cases the main impact was on ease of harvest, rather than yield.

### Yield

GB national average yield is estimated at 8.8-9.0 t/ha, a 6-8% increase on the 5 year average of 8.3 t/ha. Growing conditions in 2018/19 proved good for wheat with good levels of plant and tiller survival, low levels of disease and in most cases adequate rainfall, without undue waterlogging over winter. This allowed the crop to perform well, and even delays to harvest and lodging did not have significant negative effects on yield.

Farm yields in WE27 August ranged from 6.0-14.5t/ha. Typically milling varieties yielded 6.5-11.5t/ha whilst feed varieties yielded 7.5-12.5t/ha, with the occasional report up to 14.5t/ha. The best yields came from earlier drilled crops on heavier land. Second wheat crops grown on light land tended to yield the lowest. Where these crops experienced moisture stress it was often exacerbated by the presence of take-all, which further inhibited water uptake through the roots.

### Quality

The quality of most crops harvested in WE27 August held up, despite delays to harvest caused by wet weather in WE20 August. However, there are some locations in the west where quality was affected, with reports of particularly low HFNs, even on milling varieties, in the West Midlands. High yields are tending to dilute protein levels with group 1 and 2 milling wheats typically at 12.5-13.1% protein.

**Specific weight** – Average 75kg/hl, range 68-81kg/hl. Specific weights are modest, despite good yields. The highest specific weights were seen on heavier soils. Where wet weather caused delays to harvest of ripe crops specific weights were reduced slightly.

**Hagberg falling number (HFN)** – Average 271 seconds, range 120-300+ seconds. Early harvested milling wheat had good HFNs over 300 seconds. In key wheat growing areas, such as Yorkshire, East of England and the South East, average HFNs remain above 300 seconds. However, in the west with recent delays to harvest and heavy rainfall, there is a noticeable reduction in HFN, with occasional reports of milling varieties dropping below 150 seconds in the West Midlands. The lowest HFNs are associated with crops where sprouting occurred in the ear. In the South West HFNs are holding at an average of 280, whilst in the East Midlands the average is 240 seconds.

**Protein** – Milling wheat average – 12.7%, ranging from 12.5-13.1%. The range on all varieties 12.1-13.1%.

**Moisture** – Average weekly moisture contents decreased from 17% in WE20 August to 15% in WE27 August. Moisture contents remained high early in the week, starting at 18%, but the rise in temperatures dried grain for most regions. Drying has not been necessary in the last 6 days, with most crops harvested at 14% moisture dropping to 12% in eastern areas.

## Winter barley

### Harvest update

Harvest is complete. The last few crops of winter barley were harvested in WE27 August, amounting to about 6Kha.

### Yields

The current GB yield estimate for winter barley is 7.4-7.6t/ha, a 6-9% increase on the 5 year average of 7.0t/ha.

Farm yields range from 6.0- 12.0t/ha. Conventional 2 row malting varieties tended to yield 7.5-8.0t/ha, with 6 row feed barley varieties yielding 9.0-10.0t/ha. The hybrid varieties performed best, tending to yield 9.0-12.0t/ha. The highest yields came from malting varieties grown on heavy soils. Lower yields came from crops planted on lighter soils where moisture availability was limiting.

### Quality

The majority of winter barley was harvested during settled weather at the start of harvest period with most samples meeting quality specifications.

**Specific weight** – Average 64 kg/hl, typical range of 63-64kg/hl. Typically 2 row varieties lower than 6 row. Specific weights held up on the small area of crops harvested in WE27 August.

**Grain nitrogen (malting varieties)** – Average 1.6%. Ranging from 1.4-1.7%

**Germination** – Reports show germination levels close to 99% where harvested early in good conditions.

**Screenings** – Typical reports are around 4%, ranging from 2-15% with occasional reports of higher screenings off lighter land.

**Moisture** – Few winter barley crops harvested in 2019 required drying. Moisture content averaged 15%.

## Spring Barley

### Harvest update

Harvest of spring barley is 62% complete, bringing harvest progress ahead of that in the previous four years. An estimated 250Kha of the GB area was harvested in the WE27 August, with activity taking place in all regions. Harvest is 70-90% complete in most English regions, 62% complete in Wales and 25% complete in Scotland.

The largest areas harvested in WE27 August were in Scotland (54Kha) and the East Midlands (52Kha). The majority of the area left to harvest is in Scotland (180Kha), with 10-20Kha left to harvest in Yorkshire, East Midlands and East of England regions.

An estimated 12% of the spring barley area is affected by lodging this year, with the South West and East Midlands particularly badly affected. Although most reports of lodging are confined to headlands and overlaps there are occasional fields that suffered widespread lodging and the collapse of the crop. This had a localised impact on yields, but had limited impact at the national level due to the relatively small area that was affected.

### Yield

The current GB estimated average yield for spring barley is 5.4-5.8t/ha, this is a 2-9% increase on the five year average of 5.6t/ha.

Farm yields to WE27 August ranged between 5.0-10.0t/ha, with malting varieties typically yielding 6.5-8.0t/ha and feed varieties reaching up to 10.0t/ha on medium to heavy land. The lowest yields are from crops that were planted later in the year and struggled with moisture availability, or from those that were impacted by lodging.

### Quality

Most crops are meeting specification despite the poor weather and lodging issues experienced in WE20 August. There are reports that some samples are showing lack of colour, but specific weights are still holding with little sign of sprouting. Specific weights are better from crops on heavier land and poorer on lighter land.

**Specific weight** – Average 64kg/hl, typical ranges between 63-68kg/hl.

**Grain nitrogen (malting varieties)** – Average 1.6%, typical range 1.3-1.7%

**Screenings** – Average 3%, with little to no reports of high screenings ranging from 0.8-1.5%.

**Germination** – Typically between 97-99% with early harvested crops close to 100%.

**Moisture** – Weekly average 15%, compared to 17% in the previous week. Typical moisture contents of crops harvested in WE27 August began at 17-18% but decreased to 14% due to the heat over the weekend. Small amounts of drying were required on those crops harvested earlier in the week.

## Oats

### Harvest update

An estimated 69% of GB oats were harvested by WE27 August, with 80Kha harvested in the WE27 August. At 69% complete, this level of progress is slightly behind 2018, but is ahead of harvests 2015,

2016 and 2017. Harvest is now well underway in all regions. Southern regions were starting to harvest spring oats, whilst northern regions were focused on winter oats. Oat harvest remains the most advanced in the East of England and the North West where harvest is now complete, with the South East and South West not far behind at 85% and 90% complete.

An estimated 12% of oat crops were affected by lodging this season. In some cases this was in the form of a complete collapse of the crop, with stems breaking about half way down. The harvest of these crops were prioritised in WE27 August to minimise yield loss and quality impact, although slight reductions in both yield and quality were still seen.

## Yields

The national average yield estimate is between 5.5-5.7t/ha, which is close to the 5 year average of 5.6t/ha. Estimating oat yield averages is always challenging when spring oat crops are only just starting to be harvested as spring and winter varieties do not always perform in a similar manner. Winter oats tended to yield 5.7-8.6t/ha, whilst early spring oat yields ranged from 3.7-7.5t/ha with reports of milling varieties ranging between 4.7-7.9t/ha. The poorest yields came from crops competing with a high level of grass weeds and those crops with severe lodging and seed shed. Better yields came from earlier sown oats which were least effected by lodging.

## Quality

**Specific weight** – Average is at 51kg/hl, range 44-54kg/hl. Those crops that lodged had slightly lower specific weights than average. The best specific weights were on unlodged crops on heavier soil types. The lowest specific weights came from crops that lodged flat in previous weeks.

**Moisture** – Average weekly moisture content 14%, down from 17% in the week before. Reduction in moisture contents was largely due to the dryer weather and higher temperatures seen in WE27 August. Some drying was required in the early part of the week for crops which were badly lodged but towards the weekend grain was coming in under 15%.

## Winter oilseed rape

### Harvest update

WOSR harvest is complete for most regions with small amounts remaining in Yorkshire (1.6Kha) and Scotland (4.2Kha). There were an estimated 20Kha harvested in WE27 August, mostly in Scotland and Yorkshire. Harvest progress remains broadly in line with the early harvests of 2017 and 2018 which were both 100% complete at this point, and about two weeks ahead of the later harvests of 2015 and 2016 where harvest was 88-90% complete by this point.

## Yields

The current GB national average yield estimate for WOSR is 3.2-3.5t/ha, just below the 5 year average of 3.5t/ha.

Estimating yields in the East Midlands, East of England and South East was made more challenging this season due to a significant area of late crop failures. These were patches or parts of fields that were damaged earlier in the season, and then succumbed to high weed burdens that were burnt off prior to harvest to reduce weed burden in future years. These areas were therefore included in the overall area of WOSR that was assessed for yield. These regions already had highly variable yields as a result of CSFB and pigeon pressure during the season, so the loss of area further reduced yields. Elsewhere

WOSR yields held up reasonably well with northern England, Scotland and Wales reporting yields close to average this week. Farm yields ranged between 1.2-5.0t/ha. Lower yields were less affected by soil type, instead reflecting the level of CSFB and pigeon damage.

### Quality

Oil contents are slightly lower than average with the lowest oil contents reported in the South West and East of England. Crops in the West Midlands and East Midlands are reporting slightly higher oil contents from crops which managed to yield well despite damage.

**Oil Content-** Average 44%, range 38-48%.

**Moisture-** Moisture contents were slightly high at the beginning of WE27 August due to heavy rainfall in the previous week. However, the hot weather experienced later in the week brought moistures down to an average of 8% or below which meant very little drying was needed.

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