

AHDB provides regular updates about GB harvest progress on the Markets website. In past harvest reports, harvest week 1 has been the second week of July and so although this is the fifth report of this year's harvest, it provides information for week 9 (Week Ending 5 September), for ease of comparison with previous reports. Please note that reporting takes place up to the close of play of Tuesday each week.

Overview – Week 9- WE 05 September

Harvest report 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 weather over the last fortnight was mixed, with a dry end to August, followed by an unsettled start to September. The dry days allowed most growers in the southern half of GB to complete their harvest. Moving north, frustration is increasing due to the stop start nature of the harvest and regular heavy showers over the last fortnight in Scotland and Northern England. Conditions are becoming increasingly autumnal, with heavy overnight dews and cooler days leading to only part-day harvesting opportunities for many. Overall progress in the last fortnight amounted to 830,000 ha, or 22% of the GB area of cereals and oilseeds crops harvested. To date 90% of the GB crop area has been harvested, ahead of the five year average of 85% by the beginning of September. In Scotland, harvest is 55% complete overall, ahead of 2016 when harvest progress was just 44% by this point. Whilst harvest progress is still ahead of the 5 year average, progress for many farmers has felt slow and frustrating due to frequent weather disruptions.

Winter wheat harvest is now 90% complete with remaining areas being primarily in Scotland and Wales. The spring wheat harvest now stands at 60% complete, with the majority of crops harvested over the last fortnight. Winter barley harvest is complete and 50% of the spring barley area has been harvested. Good progress has been made with oats, with harvest progress going from 55% to 95% complete in the last fortnight. Winter oilseed rape harvest is complete, and 50% of spring oilseed rape has been harvested.

Table 1 GB average yields and quality for cereals and oilseeds for WE 5 Sept

Crop	GB Yield Estimate t/ha	Specific weight kg/hl	Other Quality
Winter wheat	7.9-8.1	73-74	All nabim HFN~ 114-260 Protein~ 13.0%
Spring wheat	6.4-6.6	74-75	HFN~ 220-280 Protein~13.0%
Winter barley	6.8-7.0	64-65	Grain N ~ 1.6% Screenings ~ 5-10% Germination ~ 95-100%
Spring barley	5.9-6.1	63-64	Grain N ~ 1.7% Screenings ~ 2-8% Germination ~ 94-100%
Oats	5.8-6.0	53-54	
Winter oilseed rape	3.4-3.6	68-70	Oil – 45%

*HFN – Hagberg Falling Number

Weather

WE 29 August was predominantly dry, with particularly warm weather experienced over the bank holiday. Conditions turned wetter and more unsettled for the following week. The dry end to August allowed farmers in the South and East to complete harvest. WE 29 August, rainfall at the AHDB trial sites averaged just 2.0mm, with a high of 9.2mm in Easter Howgate (Midlothian) and a low of <1mm in Edmond (Shropshire). The following week (WE 05 September) brought more rain and unsettled conditions. Rainfall across the AHDB trial sites averaged 15.6mm with a high of 34.2mm in Stoke Climsland (Cornwall) and a low of 1.6mm in Deopham (Norfolk). Temperature averages across the AHDB trial sites have varied between 14-20°C.

Harvest Progress

To date 90% of the GB cereal and oilseed area has been harvested, with progress remaining ahead of the five year average of 85% complete by this point. There were an estimated 830,000 ha harvested in the last fortnight. The Scottish harvest is 55% complete overall, ahead of 2016 when harvest progress was just 44% by this point, although harvest 2016 was a late harvest. In Scotland, the crops still awaiting harvest comprise mainly of 154,000ha of spring barley and 71,000ha of winter wheat.

The good early start made to harvest progress in the English regions compared to normal years hides the challenges faced by farmers this season. For most of the harvest season across GB unsettled and showery weather has prevailed, giving a very stop start harvest. Weather has been the limiting factor on harvest progress for most of the harvest, with farmers having ripe crops stood in fields waiting for weather windows. Some crops are still maturing in Scotland.

GB winter wheat harvest is now 90% complete. An estimated 30% of the GB area of winter wheat was harvested over the last fortnight, mostly in the last week of August, with unsettled weather disrupting harvest in the North during the first week of September. Harvest in Scotland is now 30% complete, with a significant start made to the regional area over the last fortnight. Farmers are opting to harvest at higher moistures in order to ensure the crop gets harvested with minimal further delays. The largest areas of crops harvested in the last fortnight were in Yorkshire and the Eastern region with around 100,000ha harvested in each, and harvest is now complete in the North West, Eastern and South East counties. Group 3 and 4 varieties will be the focus of harvest when conditions allow. Lodging has not increased, with an estimated 5% of the national area having been affected by lodging to a greater or lesser extent.

Yields

The current GB average yield is forecast to be slightly above average at 7.9-8.1t/ha (GB 5 year average 7.9t/ha). Over the harvest, English crops on average have yielded 2-5% above the farm average in most regions, with occasional crops averaging 10% more, and with Scottish winter wheat harvest now well underway, yields appear to be 6-8% above the Scottish 5 year average. There remains a great deal of variability in farm yields with reports ranging from 2.5-13.0t/ha. Milling wheat yields have ranged from 6.0-12.0t/ha and feed wheat 2.5-13.0t/ha, with the higher yields reported in the South East, Yorkshire and Eastern counties. Heavier soil types with greater soil moisture availability during grain fill tended to give the better yields of 8.5-13.0t/ha although there are reports of second wheats struggling on heavier soils. Lighter soil types are yielding in the range of 6-10t/ha. In contrast to the reported farm yields the AHDB recommended list trial control means (7 sites) currently average 1.4% down on the 5 year average control. Normally the recommended list results give an indication of where final yields are likely to be, but this year they seem to contradict the farm yields.

Quality

There were only small areas of milling wheat varieties that were left for harvest in the last fortnight. The quality of remaining Group 1 and 2 wheat crops has deteriorated below milling specification except for in Scotland and the North East. In these regions, where crops are still maturing, hagberg falling numbers are still reaching 350 seconds. Most farmers prioritised the harvest of Group 1 and 2 wheats and therefore the majority of milling samples have been reported to be close to specification, although this is subject to regional variation. The quality of feed wheats is more variable, with some of these having had their harvest severely delayed by the showery weather.

- **Specific weight** - currently averaging 73-74kg/hl, range of 72-83kg/hl
- **Hagberg Falling Number (s)** - All nabim Groups average 204 seconds, with a range of 114-260, but 350 in the North East.
- **Milling Protein** - currently averaging 13.0%, range of 12.5-14.0% but dropping to 10.3% in the South West
- **Moisture** - average 17%, range 16-18%. Almost all crops harvested in the last fortnight have required drying, coming in at higher than ideal moisture contents.

Spring wheat

The harvest of spring wheat has commenced in all regions, with 60% of the GB area currently harvested. Harvest is furthest forward in the Midlands (East 42%, West 99% complete), East (100%) and South of England (~85%). Less than 8% has been harvested in each of the other regions.

Yields

The current English average yield is 6.4-6.6t/ha. Regional yield averages range from 5.0-7.1t/ha. These yields are expected to change as more data is received in the next fortnight.

Quality

Quality data is based on a small number of early harvested crops predominantly from southern England, therefore is subject to change as more crops are analysed. Early indications are that most crops are meeting specification, although there are some poor proteins being reported in the South West.

- **Specific weight** - currently averaging 74-75kg/hl
- **Falling hagberg Number (s)** - currently averaging ~248 seconds, range of 220-280
- **Milling Protein** - currently averaging 13.0%, range of 12.5-14.0% but dropping to 10.3% in the South West
- **Moisture** - average 13%, range 16-19%. Almost all crops harvested in the last fortnight have required drying, coming in at higher than ideal moisture contents.

Winter Barley

Winter barley harvest was 100% complete as of WE 22 August.

Yields

The GB average yield is forecast to be slightly above average at 6.8-7.0t/ha against the 5 year average of 6.8t/ha. Yields in 2017 were variable with a range of 4-10t/ha. The control mean for the AHDB recommended list trials is currently 0.8% down on the 5 year average control (based on 20 sites). This indicated that yields

are close to or slightly below average, in contrast to the ADAS forecast which indicates they are close to or slightly above average.

Quality

Most malting winter barley has met its specification this year, with much of it harvested before being adversely affected by the unsettled weather. Quality of feed varieties is more variable.

- **Specific weight** - average 64-65kg/hl, wide range of 58-70kg/hl
- **Grain Nitrogen (malting varieties)** - average 1.6%, range 1.3-1.8%.
- **Germination** - range 95-100%.
- **Screenings** - High in some areas, typical range between 5% (East) and 10% (North West).
- **Moisture** - average 16%, range 15-20%. The majority of crops have required drying.

Spring Barley

Spring barley harvest is an estimated 90% complete in England and Wales and 35% complete in Scotland, bringing the total area harvested to 50% of the GB area. Good progress has been made over the last fortnight with 76,000ha harvested in Scotland and 250,000ha in GB overall. The greatest area of crop left to harvest remains in Scotland (154,000ha). Rate of harvest progress has been mainly influenced by availability of suitable harvest opportunities between showers, although in Western and Central Scotland many crops still need up to a fortnight to ripen. Unsettled weather continues to increase the area of spring barley affected by lodging, now estimated at 18%. Brackling is also an issue in remaining crops, particularly in Central Scotland.

Yields

Spring barley yield forecast for GB is currently 5.9-6.1t/ha (5 year average of 5.6t/ha). Yield reports are variable with above average yields reported in the South West and East, average in Wales, South East and Yorkshire and below average in the Midlands. Yields in Scotland are currently about 5% higher than average. Recommended list yield data is yet to be published for spring barley.

Quality

The majority of malting crops continue to meet malting specification, with only a small proportion being rejected. Quality parameters have been reported as good in all regions, with low ergot levels. However, brackling and lodging are beginning to affect.

- **Specific weight** - average 63-64kg/hl, range of 62-67kg/hl
- **Grain Nitrogen (malting varieties)** - average 1.7%, range 1.5-2.0%.

- **Screenings** - range 2-8%
- **Germination** - range 94-100%.
- **Moisture** - average 17%, range 15-19%.

Oats

By WE 05 September, 95% of the GB area of oats had been harvested. Over the last fortnight 64,000 ha have been harvested, with nearly half of this area being in Scotland. Winter oat harvest is complete, with just small areas of spring oats remaining, mainly in Yorkshire and Wales. In most regions, lodging has not been an issue, with a GB average of 6% affected by lodging, with the South West reporting more widespread lodging.

Yields

Current GB average yield forecast is 5.8-6.0t/ha, a figure which now takes into account data that have been gathered from spring oat crops. Winter oat yields have tended to range from 5.4-9.0t/ha, whilst spring oat yields range from 4.7-7.6 and naked oats are lower at 3.1-5.0t/ha. There have been few yield differences reported between milling and feed varieties.

Quality

Quality data is based on winter and spring varieties harvested in all regions except Scotland and Wales.

- **Specific weight** - average 53-54kg/hl, range of 50-59kg/hl
- **Moisture** - average 16%, range 13-18%.

Winter oilseed rape

The GB winter oilseed rape harvest was 100% complete as of WE 29 August.

Yields

Current GB average yield forecast is 3.4-3.6t/ha (5 year average is 3.4t/ha). Farm yields have typically ranged from 2.3-5.2t/ha, with most crops producing slightly higher than average yields. The poorest yields of under 3t/ha tended to be from crops grown on lighter land and areas where the crop struggled due to pigeon damage, earlier drought or poor establishment leading to patchy fields. The highest yields of up to 5.2t/ha have been reported on heavy land in the East, South and Midlands. The AHDB recommended list trials for winter oilseed rape varieties, reports control mean for 2017 was 0.6% down on the 4 year average control.

Quality

- **Oil content** - average is good at 45%, range of 42-47% reported
- **Specific Weight** - 68-70kg/hl
- **Moisture** - average 9%, range 8-14%.

Spring oilseed rape

Spring oilseed rape harvest is currently estimated at 50% complete. Harvest is nearing completion in the southern and eastern England, although elsewhere limited progress has been made. Lodging is estimated to have affected 10% of the GB spring oilseed rape area, the worst affected area being Yorkshire.

Yields

Early yields are averaging 2.1-2.3t/ha based on small areas of crops harvested in the Eastern region.

Quality

Early quality estimates are based on data from the East only.

- **Oil content** - 44%
- **Specific Weight** - no data
- **Moisture** - average 10%.