

## EXECUTIVE SUMMARY

In June, temperatures averaged 0.5-1.5°C above typical levels. This pattern of weather continued into early July, with temperatures in parts of the south exceeding 30°C on a number of occasions. Total rainfall in June averaged 50-75 mm in most arable regions, with little additional rainfall seen in July. Typical rainfall levels in June are c.100 mm. With less rainfall than usual for this time of year, there are increased concerns of water stress for many crops, especially those on light soils.

The prospect of achieving high wheat yields this season looked good up until the start of July. However, heat stress is causing early senescence in crops across many regions, but especially in southern England. The earlier crops senesce the greater the impact on yield as it can reduce the photosynthetic duration of the plant, reducing the plant's access to resources ahead of grain filling. Slightly lower temperatures, and greater moisture availability mean that yield potentials in northern England and Scotland are less affected by current conditions than for crops in the south. The weather, in particular temperature, over next three weeks will influence final wheat yields.

Thoughts turn to pre-harvest glyphosate applications and whether they are needed in winter barley, due to high prices and volatility in supply. Desiccation remains a common management decision in oilseed rape crops.

During the first week of July winter barley harvest started in some regions, especially on light land in the south. Oilseed rape harvest started during the second week of July. Combine harvesters were out overnight to try and increase moisture contents of harvested grain and seed. Early harvested crops require cooling for safe storage. However, high fuel costs mean farmers are having to balance cost of cooling against risk of grain over heating in stores.

There are ongoing concerns about the profitability of farming due to volatile markets and rising input costs. Grain prices have dropped over the last fortnight, but fertiliser prices remain very high. This has led to some farmers considering changes in cropping rotations for next season.

The continued dry weather forecast will enable combines to keep rolling unhindered.

## CROP CONDITION

Crop condition was assessed using the USDA approach. This classifies crops into one of five categories (see details below). The values are given as a percentage of the GB crop planted area for that crop, that fall into each of the categories – regional condition scores are available on the AHDB website.

### Crop condition definitions:

- Very poor:** Extreme degree of loss to yield potential, complete or near crop failure
- Poor:** Heavy degree of loss to yield potential, which can be caused by excess soil moisture, drought, disease etc.
- Fair:** Less than normal crop condition. Yield loss is a possibility, but the extent is unknown
- Good:** Yield prospects are normal. Moisture levels are adequate and disease, insect damage and weed pressure are minor
- Excellent:** Yield prospects are above normal. Crops are experiencing little or no stress. Disease, insect damage and weed pressures are insignificant

	Very Poor	Poor	Fair	Good	Excellent	Crops not yet emerged
Winter Wheat	1%	3%	21%	61%	15%	0%
Winter Barley	0%	1%	18%	62%	18%	0%
Winter Oats	0%	2%	14%	71%	13%	0%
Winter OSR	2%	5%	26%	48%	18%	0%
Spring Wheat	1%	9%	27%	57%	5%	0%
Spring Barley	0%	2%	23%	70%	4%	0%
Spring Oats	0%	4%	21%	72%	3%	0%
Spring OSR	4%	8%	23%	62%	3%	0%

Source: RSK ADAS

Note: Figures may not sum to 100% due to rounding

## WINTER WHEAT

### Crop establishment

Continued hot and dry weather, particularly in the south, is leading to early crop senescence. Heat stress is impacting crop condition scores with a reduction in the proportion of crops scoring good to excellent and an increase in the proportion scoring fair or poor. Crops scoring poor are forecast to yield 2-3 tonnes below average.

The greatest shift in crop condition is being recorded in the Midlands, Eastern and South East regions.

Crops are now between GS75-85.

### Nutrition

Crops received the full planned application of N, but some farmers have reduced the foliar urea application rate of nitrogen for milling wheats.

### Weed pressure

Bromes and wild oats are the main issues present in the crop where it was not patch treated with glyphosate earlier in the summer. High costs and reduced availability of glyphosate meant its use for patch treatment was less widespread than normal.

### Pest pressure

There have been aphids reported, but below treatment threshold levels.

### Disease pressure

In June, where crops received rainfall during flowering and inoculum was present, there are now obvious signs of fusarium head blight. This is impacting yield potential in the worst affected crops.

Signs of take-all are appearing, in crops with prematurely ripened heads, with second wheats most affected. Take-all symptoms are more exaggerated on lighter land where crops are under greater water stress.

### Prospects for the coming months

The focus is now turning to harvest. Harvest is expected to start in late July with earlier maturing varieties and crops on lighter land in the south.

Yield prospects remain highly uncertain. There are a number of factors that would have indicated higher yields including good establishment, a bright dry warm winter leading to good growth and root establishment, low overall disease pressure as well as high sunshine levels in March, April and June promoting tillering, tiller retention and early grain fill. However, the dry spring delaying nutrient uptake, lack of rainfall, dull weather in May reducing floret development, increased weed competition as well as high temperatures in June and July hastening senescence, will likely have an impact on yield prospects. For each day grain filling is shortened by as a result of high temperatures, ADAS forecast a 2% reduction in yield.

## WINTER BARLEY

### Crop establishment

The crop is ripening well with the recent dry, sunny weather. Harvest started for the most forward crops on the lightest land in the first week of July. The full campaign began in earnest on the 11th July.

Heat stress is impacting crop condition scores, with crops on light land most affected. However, the majority of crops are still rated good to excellent.

With the current cost of fuel and good weather forecast, farmers are waiting until crops reach optimal moisture before starting harvest, to minimise drying/cooling costs.

### Nutrition

All complete at planned rates.

### Weed pressure

Bromes are the main issue present in the crop.

### Pest pressure

Pigeons are feeding on crops and there is BYDV present in some organic crops.

### Disease pressure

T2 fungicides worked well, with disease pressure low for most. Early ramularia did not develop into a significant problem.

### Prospects for the coming months

Prospects are looking good. Initial reports are of good specific weights, but hot grains that require cooling.

## WINTER OATS

### Crop establishment

Winter crops are ripening well, with the majority of crops being scored as good. Early senescence is occurring where crops are affected by heat or water stress.

### Nutrition

All complete.

### Weed pressure

Overall weed control is good.

### Pest pressure

There have been aphids reported but are below treatment threshold levels. There has also been some BYDV detected.

### Disease pressure

T2 fungicides have worked well, and overall disease pressure remains low.

### Prospects for the coming months

Hot and dry weather over the next fortnight has potential to erode yield potential – but actual effects remain highly uncertain.

Harvest of winter oats expected to start in the next 7-10 days in England. Harvest in Scotland is a month off, where most crops are spring varieties.

## WINTER OILSEED RAPE (OSR)

### Crop establishment

Harvest started last week in the most eastern parts of England. The bulk of the WOSR harvest was expected to start w/c 11th July. Concerns over low moisture content is leading to harvest taking place over night or early morning.

Glyphosate has been applied to desiccate crops. Hot weather has hindered glyphosate application with farmers applying during early morning or late evening to maximise plant uptake.

### Nutrition

N applied as per the planned rate.

### Weed pressure

Cleavers and charlock are appearing on headlands. Thistles and mayweed are also appearing above the canopy in fields, but good establishment has allowed the OSR to outcompete with many weeds.

### Pest pressure

Mealy aphids are damaging seed pods for some, which will reduce yield potential. However, it is too soon to access to what extent.

Pod midge has been seen in crops that have been damaged by seed weevil or mechanically. The larvae feed on the pod wall, leading to damage and eventual pod shatter.

### Disease pressure

There are generally low levels of sclerotinia this year. Light leaf spot has been the main disease issue - symptoms are mainly on the stems. However, lesions are visible on the pods in susceptible varieties, which can cause them to distort, resulting in yield losses. The first symptoms of verticillium stem stripe have also now been seen in susceptible varieties.

### Prospects for the coming months

The best crops have good yield potential, but those that had patchy establishment and/or pigeon/CSFB damage look less promising.

## SPRING WHEAT

### Crop establishment

As per the last report, crops that established well on heavier land are faring better with the heat and water stress than those on lighter ground.

There is some early senescence occurring.

### Nutrition

All applied as planned. However, some farmers have reduced fertiliser applications due to higher input costs.

### Weed pressure

Grass weeds, such as blackgrass, brome and ryegrass are present. However, like oats, spring wheat is often grown on land with little or low infestations of these weeds.

### Pest pressure

No issues reported.

### Disease pressure

Septoria pressure is reduced due to dry conditions. T2 and T3 spray applications provided good control of rust in most varieties. However, in susceptible varieties low levels of infection remain.

### Prospects for the coming months

Prospects depend on the extent of water and heat stress experienced between now and harvest.

## SPRING BARLEY

### Crop establishment

As with spring wheat, early drilled crops in heavier land are faring better in the current conditions. Heat stress is starting to affect the crop condition scores of some spring barley crops, but the majority are still classified as good.

### Nutrition

Nitrogen applications were as planned, particularly on malting varieties.

### Weed pressure

Late flushes of wild oats emerging that are unlikely to affect yield, but seed drop and reinfestation may occur. There is also a risk of contamination of grain samples at harvest.

Bromes visible above the crop canopy.

### Pest pressure

Continuing BYDV pressure for farmers.

### Disease pressure

Crops are beginning to get stressed by low rainfall, leading to increased levels of net blotch and ramularia.

T1 and T2 have generally provided good control of rynchosporium.

### Prospects for the coming months

Average prospects, although some premature senescence seen.

## SPRING OATS

### Crop establishment

As with other crops, early drilled crops are faring better with the heat and water stress than later drilled crops with poorer establishment.

There have been low levels of lodging reported.

### Nutrition

There have been reduced N inputs for this crop due to high input prices.

### Weed pressure

Herbicides have worked well. Most spring oats are grown on land with little or few grass weed problems. Where blackgrass, ryegrass and brome have been present, it has been at relatively low levels.

### Pest pressure

Aphid levels are below treatment threshold. BYDV is present in some crops.

### Disease pressure

Mildew and crown rust were well controlled by T1 and T2 fungicides. There is some concern that late season brown rust could appear now that T2 fungicides will be wearing off. To date brown rust levels remain low.

### Prospects for the coming months

Good prospects for early drilled crops, mixed prospects for later drilled crops.

## SPRING OSR

### Crop establishment

Those that do grow SOSR have reported mixed establishment, most at mid flower/pod set.

### Nutrition

Applications as planned for most.

### Weed pressure

Redshank, charlock and fat hen have been sighted. Dry seedbeds at pre-em, indifferent crop competition where establishment was poor and lack of post-em herbicide options, are likely the cause.

There has been good control of grassweeds.

### Pest pressure

There is CSFB and pigeon damage to late drilled crops.

Mealy cabbage aphid reported in some crops. In spring oilseed rape, serious infestations of mealy cabbage aphid can cause pod distortions and yield loss.

### Disease pressure

Dry conditions reduced sclerotinia risk, leading to a reduced proportion of the crop being treated during flowering.

### Prospects for the coming months

Prospects are variable and dependent on pest and weather pressures.