AHDB ARABLE CROP REPORT

Thursday 28 March 2024



EXECUTIVE SUMMARY

The UK has experienced the second wettest August through February since 1837, since records began. The worst conditions have been in the East Midlands and neighbouring regions of the West Midlands, East, and Yorkshire and the Humber. Conditions have been poorer than usual in most parts of England, including the South West, although for many, not as extreme as the Midlands. The weather in Scotland has reduced winter cropping, but by less than Central England as conditions have not been so unusual and more cropping in Scotland is spring planted, though this is also delayed.

Fieldwork is now taking place on lighter, better draining soils and drier areas, and these farmers are now making headway with spring drilling and crop treatments. But for some farms fieldwork is still not possible, and some efforts have damaged tramlines or soil structure. Some growers will be making large fertiliser applications as the crops are hungry, and first nitrogen applications are later than usual.

Targeting inputs is generally the biggest challenge at present for winter crops – where do you stop and start in patchy crops that are not bad enough to replace with a spring crop? What do you commit to spend and apply? This is all linked to yield potential, which is inevitably very difficult to predict at present. It will not be good in many cases.

The 2024 harvest will comprise a <u>lower than usual winter area</u>, with considerably lower winter crop yields. The spring planted area is likely to be higher than normal, but it is too early to say with confidence on areas or yield potential. There is always considerable variation in yield and quality but expect this to be amplified this year.

The information in this report was captured up to Tuesday 26 March 2024 for AHDB by The Andersons Centre. Differences between crops are explored below.

CROP CONDITION AND GROWTH STAGES

Crop Condition ratings have been undertaken using the USDA methodology. The national (GB) scores are provided here, with regional ratings on the <u>AHDB website</u>.

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.

These ratings are of those winter crops that have survived and remain in the field. Several fields have been written off and have become either fallow, or a spring crop so are not included in the assessment. This suggests that the overall condition of the crop planted was poorer than this table describes.

GB crop condition ratings

	Very Poor	Poor	Fair	Good	Excellent	Crops not yet planted or emerged
Winter Wheat	17%	23%	26%	25%	9%	0%
Winter Barley	15%	21%	25%	26%	12%	0%
Winter Oats	15%	20%	28%	26%	11%	0%
Winter OSR	18%	25%	27%	25%	6%	0%
Spring Wheat	0%	0%	0%	0%	0%	100%
Spring Barley	0%	0%	0%	0%	0%	100%
Spring Oats	0%	0%	0%	0%	0%	100%
Spring OSR	0%	0%	0%	0%	0%	100%

Source: The Andersons Centre

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

WHEAT

Overall

The national condition of wheat is considerably poorer than usual, with just 34% rated as in a good or excellent condition. At this stage of spring, we may not have experienced such a poor looking crop in living memory, possibly longer. Wheat regularly astounds on its ability to recover from poor winters; this year will be a major test of this ability.

Crop establishment

While many crops of winter wheat were drilled successfully, heavy autumn rain followed soon afterwards. In large areas, seed rotted before it had a chance to germinate fully. For crops which did germinate, the rainwater damaged the very young, ill-established plants, particularly in the Midlands. Much of the remainder did not establish well and entered winter with plants small and weak, leaving patchy fields. Much land that was planned for winter wheat (either planned and not planted or planted and lost) will be drilled with a spring crop, remain fallow or become an environmental scheme.

Fundamentally, root mass on many crops is small and many crops are shallow rooted. This all means they will be struggling to find nutrition (and possibly water) later in spring and summer. Soils are also in poor order generally, with slumping, ponding and capping; crops certainly have everything against them. Some would advocate rolling in spring after a season such as this to stimulate growth and tillering, but for many it is far too wet to even contemplate such activity.

Since the daily temperatures have picked up, some growth has occurred, but slowly, because root structure is poor.

Nutrition

Applications of spring nitrogen have been delayed. Normal late February early March applications of nitrogen and sulphur are now mid-late March applications, and some land still won't travel. This is now late, and some crops are looking stressed as a result, on top of the impact from waterlogged soil. Some growers will have started second applications over the recent weekend in an attempt to help crop development, but some of the wettest land may have only just received a first dose, so as yet little impact has been observed. A lack of nutrition means tiller numbers are generally reduced, which will also affect yield.

Phosphate and potash applications will also be required in places, and many are concerned the very wet winter will mean less is available where reserves are normally sufficient. Again, travelling is an issue and nitrogen, and sulphur applications will be the first priority. Manganese will have been applied on light soils where needed but for the most prone soil types this will have been too late and crop damage can be observed in places. The most prone soils often require an application in February or before.

In the coming week, many will be looking at applying an early PGR, to stimulate rooting, and other trace elements. But with relentless catchy weather and forecast rain, and the only dry days often being too windy for fertilising or spraying, crops will inevitably start to suffer again.

As the weather warms the soil, many crops are in need of micro-nutrition, but access remains difficult in many regions. Few second fertiliser applications have been applied yet.

Pest, weed and disease pressures

Whether to add any fungicide to the tank mix with the impending PGR and nutrition application is a big conundrum for many. Advisors will probably focus on the need but for many it's a cost they are struggling to justify, at this early, T0, timing. This is despite Septoria being carried on many wheat crops on the lower leaves and small amounts of yellow rust is also starting to appear. Yellow rust is active in the susceptible varieties of wheat, but this is to be expected.

Whilst waterlogged soils have also inevitably equally delayed the progress of weeds, the late application of herbicides has meant a reduction in grass weed control. For those that managed to get pre-emergence herbicides applied, then control has generally been pretty good. However, there were signs of crop damage from some pre-emergence applications during autumn and winter and this has hampered crop development. For those that did not apply residuals, reliance is now on contact herbicides, which can be less reliable.

Some fields will look rather messy this year, with blackgrass, ryegrass and bromes noticeable in particular as a result. The other challenge with contact herbicides is crop stress that can occur when targeting grass weeds. For crops already under pressure the timing of applications is important and many are exercising caution.

Slugs were a serious pressure in cereals, particularly those following OSR. Autumn slug control was limited as it rained every day. All slug damage is done now but this was a big issue with many reporting the worst ever slug damage they have seen.

Prospects

Despite this account, a few parts of the UK, particularly in certain areas of the south, west, north of England and Scotland, have some good fields with strong looking plants. As a general rule, it's simply down to soil type and drilling date. Those crops on good land have

fared better; those drilled before the end of the first week of October look better too. But, overall, the crop expectation is low for the 2024 harvest and how crops develop in the next month is key.

Much of the UK winter wheat crop is not strong, and either continued rainfall or a sudden switch to dry, hot weather would be equally damaging for the crop. With minimal root structure, much of the winter wheat would not cope with either.

WINTER BARLEY

Overall

Winter barley established better than most winter wheat but is less resilient at overwintered stresses. Much of it now looks sick and desperately needs warmth and sunshine to get it going. Just 38% of winter barley is rated as in a good or excellent condition.

Crop establishment

Winter barley, being the first cereal drilled, had more time to establish into larger, stronger plants before the autumn fields became waterlogged. Most winter barley was drilled in reasonable conditions, and having established well, many fields were well placed for winter. However, barley is not so resilient as wheat and has gradually declined in condition throughout the winter in many parts of the country.

Nutrition

Winter barley now desperately needs nutrients, warmth and sunshine to get it going. Some barley is turning yellow and is going backwards. The crop badly needs to dry out. Its root development is poor in many parts of the UK. The crop that has received early nitrogen is responding very well, with much catching up to be done.

Getting the first or second spring nitrogen feed to winter barley crops is now a priority to save tillers and give it some colour to help it photosynthesise, and therefore grow. The main concern is maintaining tiller numbers; this will be the main factor driving yield this year.

Pest, weed and disease pressures

Disease pressures are currently reported to be mostly at 'normal' levels. For example, we are not seeing heavy loads of BYDV yet, although it is arguably too early to tell. There is some mildew in the barley but nothing that can't be managed.

Grass weeds are present in winter barley, like all winter cereals, having been unable to spray them in many parts of the UK in the autumn. In cereals generally, there are broad leaf weeds but nothing unusual other than the lack of autumn spraying.

It will soon be time to pass through winter barley with foliar nutrition, PGR and probably a first fungicide, although a T0 may be difficult to justify economically. Strengthening roots for some crops could be critical to prevent lodging.

Prospects

Barley prospects is a tale of two halves. On good free draining land where the crop has managed to receive early nutrition and soils have warmed, it is heading through the growth stages quickly as it would normally do at this time of the year. On heavy wet clay soils, which are still cold and where nutrition has probably been delayed, they look poor and sick, and will inevitably have lower yield prospects now because tiller numbers will be lower.

This crop is very dependent on a warm dryish spring. Continued persistent rain or hot, dry conditions would damage the crop further. Many plants tillered less than usual leaving a lower yield potential. Small root development suggests even reasonable looking crops may not return record yields.

WINTER OATS

Crop establishment

Winter oats have fared better than most winter crops. Oats are a strong and resilient crop with a wide planting window and many managed to establish better than other cereals in the less-than-ideal soil conditions. Even now, there are some winter oats yet to drill. While winter oat conditions are better than other winter crops, still only 37% of the crop is rated as good or excellent.

Nutrition

Oats don't require early nutrition quite as promptly in spring as other cereals, so although they are starting to look a little sick now, this generally isn't an issue. They will receive nitrogen and sulphur as soon as other applications are caught up on other crops. Managing nutrition is generally about preventing lodging and poor root growth due to the wet soils could be an issue this year.

The early fertiliser feed, where applied, has made a good impact to the appearance of winter oats, and these crops should now pick up. The winter was clearly damaging to the crop, but what is still growing will pick up now.

Pest, weed and disease pressures

Winter oat crops are reported to be fairly clean from diseases at the moment, with only normal levels of disease seen.

Prospects

As with other winter cereals, crop conditions do not point to stellar yields. Most oats will be spring planted this year and will accelerate a growing trend towards spring drilling.

Prospects for the winter oat crop are similar to the other winter cereals; however, they probably have the best chance compared to wheat and barley of achieving reasonable yields being generally more resilient.

WINTER OILSEED RAPE

Crop establishment

Winter oilseed rape (OSR) established better than most winter wheat, having had more time to develop before the autumn rain. However, after sitting in water for so long, many plants died and there are some very bare patches in the Midlands particularly. Some fields were full of cabbage stem flea beetle (CSFB); when a crop is already weak, they are poorer at resisting other attacks. Many other parts of the UK have strong looking plants, some just emerging into flower. Some fields have strong, well-established plants with large gaps between them, and others have full, good-looking fields.

Overall, only 31% of the winter oilseed rape crop is rated as in good or excellent condition.

Nutrition

Most crops have had at least one application of nitrogen and sulphur combined; some have had two applications of nitrogen. But a small proportion of OSR has not yet had any nitrogen and is desperate for it. As the temperature picks up, nutrition becomes more important.

In a year with 'typical' or normal weather conditions, the planned fertilizer would have been applied by now, and the crop would be approaching flowering stage. Some fields in the south are starting to flower, but it is only the more forward fields this year. These more forward fields will have received a PGR, while others are a way off that.

Pest, weed and disease pressures

The level of CSFB damage within plants is not yet known but crops are looking generally reasonable across most of the UK. Weak plants may be more vulnerable than usual but this has not yet been seen. Very little spraying has been done in the last month apart from some manganese and herbicides for weed control.

Generally, weed control in oilseed rape is quite good and will not affect crop performance.

CSFB and weevils are becoming a challenge and on weaker plants where their survival is marginal, crop viability may be tested. CSFB is annually worsening in the north of England.

Some light leaf spot symptoms are being observed and are likely to increase as more leaves develop.

Pigeons were an expected challenge in the autumn and this continued longer than usual on many fields as the crop did not grow enough before winter. They are less of an issue now of course.

Prospects

Prospects for harvest are looking poor nationally. With soils still being very wet, rooting is limited. There is a big concern about the percentage of pod set as large plants this year may not have as many pods or as many seeds in each pod. The crop is likely to be mediocre at best.

SPRING CROPS

It is very early days as yet. Much drilling is delayed in central regions of England, but some fields are seeing accelerating fieldwork as late March is drier for most than previous months and warmer weather is drying the soils.

Drilling is also late in Scotland with limited progress when normally Scotland would be progressing well with drilling by now. Drilling is pressing on in southern regions of England, but it is too premature to comment on the crop development as yet.

Some seeds will be going into a wholly unsuitable seedbed, having been drenched for six months, so will now be anaerobic and cold. The seedbeds may have also suffered after a failed winter crop, and heavy implements disrupted the already unstable soil structure. Time will tell how well the soils recuperate and how well seeds germinate.

A full spring crop update will be provided next month.

OTHER POINTS

There are already concerns about the state of the soil ahead of future crops, i.e. autumn 2024 drilling, with saturation having accelerated compaction and creating anaerobic soil conditions. These concerns are especially for land which has received insufficient organic matter applications in recent years. More than a few farms will also have to rebuild their preferred crop rotation after planting emergency crops into their 'normal' rotation.