

## EXECUTIVE SUMMARY

The winter cereals and oilseeds crop year, planted for the 2024 harvest has got off to a turbulent and precarious start, with a few casualties already because of extremely heavy rainstorms in many areas.

The rain has been less persistent than in 2019, the last year when poor weather hampered drilling in a national and significant way. However, the intensity of rain this year in some regions left some growers with problems they have not experienced for several years. A lot will now depend on the weather conditions of the remaining autumn planting, winter and indeed spring growing periods. This is the case for most winter cereals and oilseed crops, but particularly wheat.

**The information in this report was captured up to Thursday 9 November 2023** for AHDB by The Andersons Centre. Differences between crops are explored below, discussed in the order they are generally planted.

## OILSEED RAPE

### Crop establishment

Being the earliest autumn combinable crop to be drilled, winter oilseed rape (WOSR) was mostly well established before experiencing any heavy rain on a widespread or intense nature.

The earliest drilled oilseed rape overall is in good condition nationally. Summer was not particularly hot or dry (short of a few days). So, the crop had a chance for the roots to develop and for canopies to cover over, developing resilience to the heaviest of rains and subsequent pest issues. A few growers have reported their early drilled WOSR being too far forward, and some have acted to slow its growth ahead of winter.

This year, as usual, a large proportion of the crop was drilled over the August bank holiday weekend, which was followed by the one, very hot week of the year. For some, where seedbeds were poorer, there was insufficient moisture to establish properly. Being small, the seeds are planted in shallow soil. As a result, for a short period, they are vulnerable to a lack of moisture and heat stress until their roots have started to develop and draw water from the soil below.

The main Cabbage Stem Flea Beetle (CSFB) migration period also occurred at this time, and these struggling tiny plants were not strong enough to resist their impact. As a result, many regions have considerable areas of WOSR either written off or in poor condition.

The UK had a wet summer, but with generally warm nights. This is ideal for both slugs and CSFB proliferation, which has been heavier than usual and certainly worse than last year. Most recovered but some areas failed at this point.

Generally, WOSR that was planted after the hot weather at the end of August / start of September, i.e., late planted, has developed much better as there was more moisture and less CSFB pressure. But the weather being considerably colder, hampered the speed of root

and shoot development, whilst encouraging slugs to proliferate. These later-planted crops are not as far forward as they should be.

It is clear that more WOSR will be written off than usual, with some reports suggesting that as much as a fifth of crops in some regions may not make it to harvest. The current waterlogged fields mean that there is likely to be an increase in write offs, though this also depends on weather conditions over the winter.

### Nutrition

Many growers now consider the risk of establishing OSR as high and as such aim to limit up-front crop costs until the crop is well established and confidence in its future obtained. However, inevitably to aid crop establishment many recognise early nutrition is important and so these costs are still incurred even if crops don't survive.

For those crops well established, there appear to be no major nutrition issues at this stage. The main problem is likely to be 'wet feet'. In 2019 this significantly affected root development and biomass development, as well as crop development and yield the following summer.

### Weed and disease pressure

There are some grass weed problems in WOSR crops, but not more than usual. The early drilling nature of the crop and the moist conditions aided grass weed development. Autumn herbicide applications have begun, but some options are expensive and irreversible, meaning the field options become limited if the WOSR is then written off. Generally, soils are still too warm to commence propyzamide applications.

### Pest pressure

As a generalisation, those regions that have not historically been as affected by CSFB have been affected more this year, such as the West, North, and possibly Scotland. Those regions with historic CSFB infestations have grown less OSR in the last couple of years so perhaps are finding less of a problem this season.

### Prospects for the coming months

The AHDB's Early Bird Survey (EBS) suggests the planted OSR area will be considerably down on last year (by 16% or more). With greater write-offs, the final harvested area could be considerably lower than that.

It is too early to give detailed prospects. But already, as some crop write-offs are reported and some crops are struggling in the waterlogged soil, record yields are not expected and the overall area has more downside than the EBS suggests.

## WINTER BARLEY

### Crop establishment

Most winter barley was drilled in reasonable conditions. As a result, the majority looks quite good. The typical drilling start date for winter barley is 20 September. Weather that week this year was catchy, so many growers did not start drilling until a few days to a week after their ideal start date. Crops drilled later, after a grassweed flush or on heavier, wetter soils are not fairing so well and are struggling with the wet.

Areas that generally start drilling earlier than most (by about one week), tend to have generally lower grassweed pressure, such as the West and North. However, these areas also had more challenging weather conditions, so most crops were established slightly later than planned.

Around the UK, fields of earlier drilled winter barley are strong and complete, including headlands because it went in well, and is now a good size. The few later drilled crops are struggling slightly more.

### Nutrition

Much winter barley has recently turned a concerning yellowy colour, because the wet conditions mean barley roots are sitting in water, curtailing their growth. This is fairly typical of winter barley in winter and most agronomists expect it to pull through though. Wet conditions can affect yield if root growth does not restart but for short periods, the discolouration is relatively harmless. In this condition though, barley will not cope well with persistent waterlogged soil all winter or possible dry conditions in the spring as root structure and biomass will be harmed.

Should soils stay wet all winter, it will delay the all-important biomass development of roots. This is the same for all winter crops. Under such conditions, the final yields of the crops will be affected.

Local rainfall and soil conditions are key. Generally, winter barley in the South West has been faring relatively better than other areas, and crops in the South East remained in good condition until later in October.

### Weed and disease pressure

Wind back a year and the dry summer/autumn of 2022 led to poor grass weed chits and as a result, stale seedbeds were fairly ineffective. As a result, grass weed seed return was high this harvest (2023). However, due to the moisture this autumn, many will have managed to achieve good stale seedbeds and one or two kills with glyphosate ahead of drilling. Therefore, prospects for cleaner crops bode well, which is the same for all cereals.

Similarly, the moisture will have aided the effectiveness of pre-emergence herbicides. The downsides are that in the regions where significant intense rainfall was received, those pre-emergence herbicides may have been lost and the effectiveness reduced.

Barley Yellow Dwarf Virus (BYDV) is a risk as ever with relatively mild autumns. The wet weather is challenge for those that need to spray, although this is not standard practice any longer, particularly with the drive to use less insecticides. The Integrated Pest Management (IPM) payments under the Sustainable Farming Incentive (SFI) scheme are also encouraging less insecticide use. In high pressure areas, resistant varieties are favoured.

### Prospects for the coming months

The yield potential for winter barley is mostly unaffected as yet, as long as the soils the young plants are sitting in, dry out a little before the cold months of winter set in. If root growth is damaged at all, a dry spring will be more harmful than usual. It is therefore still a little early to draw conclusions about yield impact.

## WHEAT

### Crop establishment

Much of the recently planted wheat in the UK is looking poor. It's the wheat that is already drilled but not fully established that of most concern. Concerns over crops emerging or indeed failing are reported by all sizes of farming and agronomy enterprises across many regions.

Heavy rains from 13 to 22 October, then from the last few days of October into early November caused serious germination problems for wheat that had recently been planted.

Other, earlier planted wheat that had emerged was more resilient and more able to resist the severe rainfall that some regions experienced.

Regionally, the Midlands (both East and West) and the North East are the worst affected. In these regions, some of the wheat area could end up being written off and replaced with other crops or fallow. This may skew final crop area figures from the recently published EBS results of planting intentions. AHDB will provide an update in early spring.

The land that was worst affected in the wettest regions was the heavy clay soils, in particular those that had been worked into very fine tilths. Few farmers expect and therefore plan for five inches of rain to fall in two days; that is very unusual.

There is still a lot of winter wheat yet to be planted, more than usual at this time of year for the reasons mentioned above. By the end of October, we would generally expect most of the winter wheat crop to have been drilled, with the later plantings waiting to follow late harvested crops such as maize or potatoes. Planting progress is likely a few percentage points lower this year (as of the start of November), though there is regional variation with larger delays reported in the East Midlands.

Farmers on light land, for example the sands of East Anglia, can drill earlier and have been able to continue more easily between the rain. Soils with less clay also allow better water infiltration during the intense rainfall and as such, seed not germinated has a better chance of not rotting. This is the same for all cereals.

Poor root growth is a big risk for this year, as the ungerminated wheat seed has only a short (24 hour) capacity to sit in waterlogged conditions before losing its vigour or rotting. Very young plants and those just germinating are also vulnerable, but those with some rooting and a shoot appearing demonstrate far greater resilience to these sorts of soil conditions.

Much of the damaged wheat discussed above is not simply entire fields, but in field corners and headlands that have been run on, areas of heavier soil and so on. This means many fields are patchy, which makes the decision to replace a planted field more difficult.

Some growers might be more tempted to patch such corners and headlands by re-drilling or to leave it as a thin crop of wheat. Growers who wish to, must decide when they would intend to replant. Many will not want to patch up before Christmas, with the weather being too cold and wet with a higher risk of seed rot. It would be expected for growers to try planting the same variety, if available, and hope it catches up for a simple harvest. But, if the same variety is not available, some may become mixed variety or even mixed crop fields.

Warm days have allowed crop growth to continue.

### Nutrition

Wheat nutrition decisions will be dictated largely by what the crop looks like in the spring. At present, it is more about the number of plants to make a viable crop, patching up or replacing with alternative spring options. As with the barley, waterlogging is widespread and low plant counts per square metre. There is also the risk of losing more plants if there is a period of cold during winter when plants are still small and undeveloped. There is a lot to play for yet but generally wheat crops do not look good. There may be yield impacts on the well-established crops, but the risk is higher for those presently in poor condition.

### Pest pressure

This year has possibly experienced the worst slug pressure for 10 years or longer. Some growers, who have never used pellets, report the use of multiple applications and multiple pellets in total quantity with limited effect. A lot of organic matter incorporation in recent

years in a bid to improve soils is benefitting growers, providing agronomic benefits. But, coupled with the warm wet weather, it has also created an ideal habitat for slugs.

With an unexciting straw price this year and wet harvest, more was chopped than usual. This has contributed further to slug populations and the need for more nitrogen to break down crop residues. When this is combined with poor establishment, wheat crops generally look rather sorry for themselves and 'sick'. Areas with less rainfall have fared better.

Pellets have not been working so well this year for some due to regular rainfall and huge slug populations. Generally, it has been difficult to control slugs when crops were planted as they tend to hollow the grain below ground, rather than feeding on pellets above ground. As such, large areas have been lost to hollowing. Once the crop has emerged, it is generally easier to control slugs grazing growing crops.

### Prospects for the coming months

The weather over the last month has likely already impacted the harvest prospects for 2024. Some planted areas are likely to be replaced, while some will remain and have crop input costs managed according to yield prospects. Some will be fallowed. Other areas will be retained but be thin or patchy. Wheat does have a remarkable capacity to compensate in good spring weather, with greater tillering so if the spring offers good weather conditions, we might yet be surprised. But this is not guaranteed.

Wheat crops will be thinner in the spring, suggesting lower than usual crop yields for the 2024 harvest than usual. Our chief concern at this stage of the plant development is root mass, it is an important process. Root mass is critical to the success of the crop, especially if spring turns out to be particularly dry, making nutrients inaccessible at the soil surface. The same is true if spring is particularly wet, compounding the issues some wheat crops have experienced this autumn.

Some regions will see higher than usual proportions of growers switching to spring cropping, most of which would likely be spring barley. With milling wheat premiums high, spring wheat could also be attractive. This will be particularly so if rain returns in quantity in the coming weeks. It should be noted that in years with less winter and greater spring cropping, competition for spring seed is often greater than usual.

## OATS

### Crop establishment

Oats tend to be planted slightly later than wheat as in some instances there is less herbicide chemistry available than for wheat. As a result, there remains a good proportion of the winter oat crop still to plant. However, unlike other cereals, they generally can be planted safely until the end of March still as a winter variety. Therefore, the prospects of getting the remaining crop in the ground remain fairly strong, albeit with a yield impact for the latest drilled.

Oats are generally a bit more resilient and hardier against pests such as slugs. As such, winter oats have largely escaped slug pressure. However, poor root growth is a risk this year leaving them open to effect from a potential dry period in the spring.