## **Crondall Society**

## Spring Article.

As I sit here in January thinking about this article with the wind howling around the house and the temperature barely above freezing, harvest seems along time ago and next summer seems a while away yet.

We use the winter months to review the previous season and plan for the coming one. Last summer, as I am sure you will remember, was hot and very dry. We didn't have much rain from April to the end of August and we had some very hot days. This weather followed a wet and cold spring which resulted in us planting our spring sown crops about a month later than normal; we didn't finish them until the middle of May. Because of this, the crops didn't have time to get enough roots down into the soil to help them through a dry summer. They did all survive but the yields were down 15% on average. The winter sown crops fared better but were down nearly 10% on average. It is not all bad though; we finished harvest three weeks early and we didn't have to dry any of the crop which saved us about 50000 litres of fuel, almost half our normal usage! The drought affected much of Europe causing the prices for wheat to increase from £130 per ton in June 2018 to £185 by the middle of September. As the value of most of the crops we grow are affected by the wheat price, the value of everything went up a similar amount.

During the summer, while we are still harvesting, we also start to plant next year's crops. Cover crops, (used as green manures and grazed off during the winter) and oilseed rape are always planted first. This year they fortunately found enough moisture to germinate and grow but it was a bit nervewracking planting seeds into dust with no rain in the weather forecast. The oilseed rape a is particularly difficult plant to establish as it is very small when it emerges and so very vulnerable to slugs and an insect called the Cabbage Stem Flea Beetle. Both pests require the crop to be checked every day as they can clear big acres in very short periods. This, as you can imagine, is time consuming at a busy time of year especially if you have 800 acres to check! Slugs are fairly straight forward to manage in a dry year - we roll the fields after sowing and apply slug pellets if needed. Most years we would apply 2 or 3 applications. The flea beetle is more difficult. It feeds on the plant and lays an egg on the leaf. The egg hatches and the larva bore its way into the leaf, making its way to the stem where it hollows out the centre. We used to use Neonicotinoid seed dressings to control them but now these have now been banned in the UK. They can still be used some European countries under a derogation for exceptional circumstances, often this happens most years! We can only spray the adults as they are feeding on the crop. This kills many beneficial insects and the flea beetle is becoming resistant to the sprays. We are trying different ways to beat them including simply growing more plants per hectare to try and reduce the pressure on individual plants, to growing other plants in the same field mixed with the oilseed rape to disguise the smell of the plant so the flea beetle isn't attracted to that field. We are checking the stems now and counting the numbers of larvae per stem to see if either option is working. At the moment there seems to be very low numbers of larvae and no difference between the different systems.

In late September and October, we sowed our winter wheat, barley and beans. By this stage we had a good amount of moisture in the ground, so the seed germinated and grew very quickly. Again, slugs can be a problem but because of the dry summer their number were reduced so they did very little

damage. The wheat and barley were all up and well established by mid-November but the beans go in last and deepest so didn't make an appearance until nearly Christmas.

The farm now looks the best it has done for a few years with all the crops looking well and no gaps or failed areas anywhere and for this I have to thank a dry summer which suits our heavier soils, but more importantly the team that works with us. It all starts with harvesting and getting that done right so that the cultivations and sowing then become easier and the crops establish quickly and evenly. Our full-time team, Nick and Tom, take on a lot of the responsibility for managing the harvest and sowing and put in a lot of hours to make sure it is done right. Without their expertise the farm wouldn't run.

We all took some time off after sowing and over Christmas as it is generally a fairly quiet time and are now emptying our grain stores and sending the grain to the various mills and ports around the country. We also have a never-ending list of jobs that we want to get done before we get busy in the spring again. This normal starts with overhauling all our machinery, cleaning seed ready for spring, buying fertiliser and spreading it, testing soils for different nutrients, fencing fields, cutting hedges, repairing buildings and anything else that pops up. We are never really quiet; the days are shorter which limits what we can do outside but there is still a lot to do.

This year we have also been lambing our sheep for the first time. The first batch lambed in September and their lambs went to market in February. The rest of the ewes lambed outside in January, not a normal thing to do! Our shepherd took them back to his farm in Kingsclere where he could keep a close eye on them. Amazingly they all lambed outside with very little trouble despite the snow, but it is not something I would like to do again. You may have seen our ewes and lambs grazing up behind Lee Wood. They are all growing well and so the lambs will be weaned in March and then sold in May. We can then check and get the ewes in good condition to put the ram in with them in April so that they all lamb in the following September. It is important for our sheep system to make sure that in future they have lambs in September so we can graze them on our cover crops and fatten the lambs over winter. Ideally, we want all the lambs sold off the farm by mid-February so we can be ready to start sowing our spring crops straight after them. The ewes can then go back onto our permanent pasture for the summer. This means that we can keep more sheep as we are not grazing the permanent grass all year but it is also better for the sheep. If we were to graze the grass all the time there would be a build-up of parasitic worms that once ingested by the sheep multiply in their gut and so the sheep lose condition and also spread more eggs around the fields in their manure. By only grazing the grass in the summer it breaks the worm cycle resulting in us not having to treat the sheep for worms. We will shear the ewes in May so that they remain cool in the summer and so flies can't lay their eggs in their wool. The maggots then hatch out and burrow into the flesh of the sheep. This can be prevented with the use of a "pour on", similar to dogs for fleas, but it has to be done every 6 weeks and we would prefer not to do this. The less we have to treat them means they don't have the stress of being penned up and moved around but it also means we have a very organic product.

You will have probably noticed that we have had a lot of sheep around the village this year. They are from a neighbouring farmer who has around 8000 ewes! We are working with him as he needs the grazing during the winter and we believe that sheep do a lot of good to the soil when they are grazing the cover crops. The action of the feet on the ground kills a few slugs, moves any straw residue and, on the chalk soils, and firms them down where they have been lifted by the frost. They turn the cover crop into readily available fertiliser that benefits the microbes in the soil and provides nutrients to the following crop. This will help us reduce the amount of artificial fertilisers, especially nitrogen that we apply to the crops.

Sheep worrying is a big problem nationwide so having a flock of sheep in a field with a busy footpath on three sides was a concern. To my knowledge there has only been one incident of a dog chasing the sheep which is great so thank you for being responsible dog owners.

As the weather warms up and the soils dry out, the crops will begin to grow and we will start to apply fertiliser and crop protection products. We are constantly trying to find ways to farm that look after our soils better and reduces our impact on the environment by reducing the amount of inputs we put on the crops. To help us with this we are doing some trials to work out how far we can reduce the amount of inputs without losing yield. We will measure nutrients and disease levels in the crop as it grows and then compare the yields at harvest time. This is not organic farming but somewhere inbetween conventional and organic, focusing on improving soil health so that it can support healthy plants.

Hopefully when you read this we will have sown all our spring crops. We have about 1200 acres to sow, a mixture of malting barley, peas, linseed, spring wheat and maize all of which ideally get sown in March or early April. Some of these crops are grown on contract with the end supplier, particularly the peas and linseed. The market for these two crops is fairly small and can easily be flooded in high yielding years resulting in the price dropping like a stone. Having a fixed price gives us a bit of certainty. Spring malting barley on the other hand could be a bit of a gamble this year. A lot of the malting barley in the south of England is exported to Germany to make beer, apparently ours is some of the best they can buy, but what will happen when we leave Europe is a bit unknown.

I was hoping to avoid writing about Brexit as there is a fair bit of uncertainty about what will happen but the editor did ask me to put something in this article about it, so here goes.

Firstly, and for many farmers most importantly, our subsidy system will be phased out over the next 5 or 6 years and we are not sure yet how it will be replaced. It is likely to be payments for environment and public good but no detail has been given as to how this might work. At the moment we are paid a set fee per hectare as long as we follow some basic rules; we don't have to grow or produce anything.

The consensus among the farming community is that we will only receive approximately 50% of our current payments. At the moment, the average UK farmer currently receives £28100 per year in subsidy but only makes £2100 per year profit from agriculture, which goes to show how reliant many UK farmers are on subsidies.

The next big concern is tariffs and trade deals. If we have to trade under WTO rules then the tariffs added to our produce will make them hugely uncompetitive on the world market, hence our spring malting barley being a bit of a gamble. If by the time it comes to harvest we are trading under WTO rules the German buyers could buy cheaper produce elsewhere which would leave a lot of good quality but expensive malting barley in the south of England with nowhere to go. It is potentially worse with lamb. The UK export a huge percentage of its lamb to Europe, but New Zealand would happily send cheaper lamb to Europe and we can't produce lamb as cheap as them.

At the moment UK farmers produce high quality food while looking after the environment and the consumer is able to buy food that is, as a percentage of their income, some of the cheapest in the world. If and when trade deals are negotiated countries like USA, New Zealand and Brazil will be very keen to gain access to our markets. This may have the effect of making food even cheaper but there is no way the UK farmers can compete with those countries under our current rules. For example: we are not allowed to grow genetically modified crops or use growth hormones in beef cows to get better growth rates, both of which are available to American and Brazilian farmers. Our environmental restrictions and animal welfare rules would make it hard to compete equally with New Zealand lamb

and that is without mentioning the scale that those three countries farmers can operate at with the huge amount of land at their disposal.

We don't know exactly what will happen, but it sounds like it will change the way we farm. Marginal arable land may not be cropped and unproductive pasture, unless very extensive, may not be grazed with both either being entered in to an environmental scheme or just left unfarmed. It will provide opportunities for some, but I cannot see it helping smaller farms. The move to bigger farms will, I think, accelerate. As an industry we will have to be far more efficient and focused on our costs and the risks than perhaps we have been in the past if we want agriculture to be profitable. As a young farmer (according to the EU rules you are young till 45!) I see it as an opportunity to grow and adapt our farming business. I have seen and read how our family has farmed over the past few centuries through good times and bad and how the business has changed and adapted to meet the challenges. Hopefully we can continue to change and adapt so we can hand the farm on to the next generation.