Iford Estate News

J & H Robinson Iford Farms Ltd – est. 1895 www.ifordestate.com Issue 7 Summer 2017

A return to the old ways?

Ben Taylor, Estate Manager

Ever since man stopped foraging for wild grains and started to cultivate cereals we have faced a continuous battle against both weeds and pests. The control of these threats didn't change much for many thousands of years, until the so-called chemical revolution of the 20th century, when compounds that effectively controlled both weeds and pests allowed agriculture to massively increase outputs from a given area of land.

However, over the last few years regulators have dramatically reduced the number of herbicides and insecticides available to use, from over 1,000 in the 1990s to about 240 now, of which a further 87 are under threat. "Isn't that good?" I hear you say, since some (but by no means all) of these substances have proved to be harmful to the environment. In some ways yes, but the dramatic reduction in available products has inevitably resulted in the over-reliance on some products and, rather like with antibiotics, certain key weeds have evolved to develop resistance to these products.

The key weed on most farms in the UK is blackgrass, which in some fields on this farm is resistant to all chemicals that can be applied to the crop. The only way to control it is by the use of what we call stale seedbeds, where the field is cultivated to encourage it to grow, and then, before drilling, it is sprayed off with *Round-up*. Unfortunately this approach has limited success, and relies on a good germination and multiple cultivations – and of course *Round-up*, which in itself is under threat.

In some places, despite immense efforts to get on top of this yield-sapping weed, I am increasingly coming to the conclusion that the battle is lost, and I am starting to look at more 'nuclear' options to get on top of it. In the search for a solution I am starting to look at how agriculture dealt with weeds before the advent of herbicides. The answer is that, up until the 1970s, livestock was used as part of the arable rotation, and the expectation is that by grassing fields down, the weeds will not have a chance to set seed and will therefore return to more manageable levels.

This of course comes at a considerable cost but, in order to be sustainable over the next few decades, it is an unavoidable course of action. So, as a start, we will be returning part of the 100-acre field to the south of Swanborough to grass this autumn, and it will remain grass for three years before being returned to arable production. Other weed-infested fields will be added in turn to this three-year grazing cycle.

Drought!

This last winter and spring have been exceptionally dry, and I was getting very worried about the state of the crops. From 10th March until 14th May I recorded only 9mm of rain, with nothing at all from 23rd March – a period of nearly eight weeks. Drought has effects beyond the obvious lack of water, as the crop also suffers from lack of fertiliser which doesn't get washed in as it should. The drought-stressed crops are also prone to fungal infections.

There is a saying which goes "*Look at your crops in May, come weeping away; look at your crops in June, come away whistling a tune*". Never has it been truer! Luckily the drought broke on 14th May and crops that had looked pretty dire got a sudden 'hit' of fertiliser and water and went a bit mad. They are looking pretty promising by the middle of June but it remains to be seen what effects this will have on yields. I hope, with the current heat wave, that the grains will be swelling and that there is still enough moisture to keep them green and prevent them from dying off.

The old photo shows the construction of the first milking parlour at Lowerstalls in 1962. Note how the brilliant white roof has darkened naturally over the years. The same thing will happen to our new buildings in the back of today's photo

Then and now

These two photos were taken over 50 years apart and show the farm buildings in 1962 and the present day.

Rarity on our doorstep

We have some wonderful birdlife around our villages but it's especially exciting when we become home to a rare species. We discovered stone curlews were nesting on the Downs above us and called in the Royal Society for the Protection of Birds (RSPB).

They confirmed that there was a pair of un-ringed adults with a nest of two eggs – only the second breeding pair of stone curlews they were aware of on the whole of the South Downs. The nest, as you can see from the photo, is just a barely-lined scrape in the ground and the eggs are beautifully camouflaged.

After a bit of searching the RSPB tracked down the nest and then weighed and measured the eggs, which gave them a hatching date of around 21 June. They also asked us to carefully remove some of the vegetation around the nest which was threatening to overgrow it and potentially cause the birds to abandon.

The eggs hatched on the 20th and the RSPB will return at about three weeks to ring the chicks – part of a programme that has been going for about 20 years and is yielding invaluable information on the birds' movements and survival rates.

The nesting sites of such rare birds are kept secret from the public since they are extremely prone to human disturbance. Ours have chosen a good out-of-the-way spot so hopefully have as good a chance as any of successfully raising their family to maturity – increasing our stone curlew population by two!

The Claas 770tt is one of the largest combine harvesters in this country and it has to work hard to justify its £500,000 list price

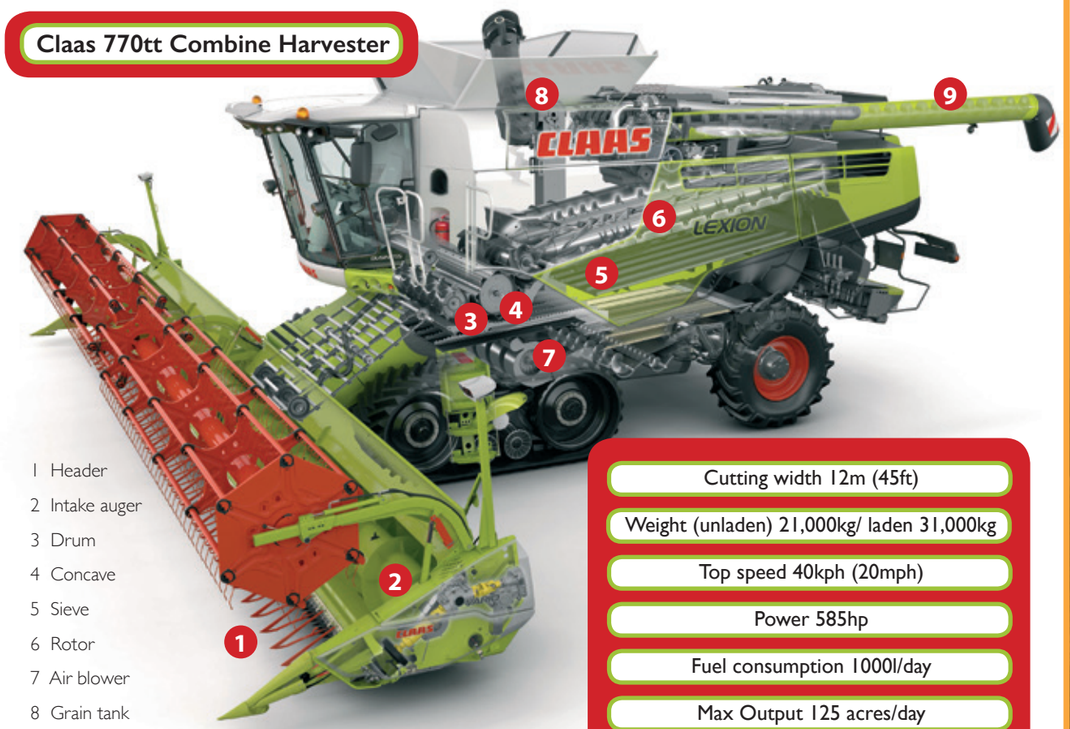
The principle of the combine harvester, which combines the once separate acts of cutting then threshing the corn, hasn't changed much since they were widely introduced in the early 1940s.

The 'header' at the front of the machine has a scissor-like knife which cuts the stalks at a predetermined height. The crop is moved into the machine with the auger and front elevator, and it then flows into the drum where it is forced through a small gap between the fast rotating drum and the stationary 'concave'. The violent action this creates extracts the grain from the ear and husk, and the majority of the grain, as well as other small debris, is pushed through gaps in the concave and onto the sieve. The straw continues into the 'rotor' where it is wound to the back of the machine. During this journey any remaining grain is separated and also falls onto the sieve. Meanwhile, the grain, chaff and any other debris is shaken on the sieve while air is blown through it, with the aim of blowing the lighter chaff out of the back, while the grain falls through the sieve and is transported up in to the grain tank. When full, the spout is extended and an auger empties the tank into the (hopefully) waiting trailer.

Whilst simple in principle, the need for high outputs requires a massively complicated and powerful machine. Electronics control all of the functions, including steering, leaving the operator to concentrate on altering settings to maximise output and quality, while keeping a keen eye out for foreign objects like stones, water tanks, old bikes and other bits of metal from going into the machine!

Many people ask why such a large, complicated and expensive machine that is only used for, at most, six weeks isn't shared or hired in. The simple answer is that it is fully used by us throughout the harvest season, but also that, with such a time critical and weather dependent operation, we cannot afford for the machine to be on someone else's farm when we are able to cut at home.

Claas 770tt Combine Harvester



1 Header
2 Intake auger
3 Drum
4 Concave
5 Sieve
6 Rotor
7 Air blower
8 Grain tank
9 Unloading auger

- Cutting width 12m (45ft)
- Weight (unladen) 21,000kg/ laden 31,000kg
- Top speed 40kph (20mph)
- Power 585hp
- Fuel consumption 1000l/day
- Max Output 125 acres/day
- Steering – GPS autopilot +/- 2cm accuracy

Profitable farming supports conservation

John Robinson

Cormorants nest on the lake's island while mute swans come in to land. John Robinson receives the Woodpecker Award for Conservation from the Duke of Norfolk at the 2008 South of England Show.

It is often suggested that wildlife conservation would be best served by less intensive farming in which crops have less fertilisers and sprays applied to them. The theory here is that weedy thin crops (as in the 'old' days) will be better for wildlife. My contention has always been that such a farmer in today's conditions of very small profit margins would very quickly go out of business and that conservation is actually best served by farming as intensively and profitably as possible so that one can then afford to support areas that are completely devoted to conservation with no chemicals or fertilisers applied at all.

In order to prove this theory, in 1989 we dug a 2.5-acre lake in a 12-acre field on the brooks that had previously been growing large crops of wheat. The lake, which has a small island, was designed especially for us by the RSPB and has different water depths and different shaped banks in order to attract as many duck and waders as possible. We also constructed an RSPB-designed hide. This all cost about £27,000 which, to some, may not sound much today but in 1989 was actually quite a lot of money to spend on a non profit-making enterprise with no grant aid.

The lake was left to fill up naturally with rainwater and, apart from planting a few thorn trees on the island, has been left to naturalise without any intervention from us.

The hide is used principally by members of the Sussex Ornithological Society but anyone who is interested is welcome to visit it by arrangement – the only condition being that they enter what they see in the bird diary. As a result we now have 25 years of bird records, (which again anyone is welcome to look at) which show that – in the period of just the last two years – 108 different species have been recorded on the lake and its environs.

It has been interesting also seeing how the natural flora and fauna have developed over the years with Marsh Marigolds, Reeds, Rushes and Goat Willows appearing of their own accord. Initially there was a large population of frogs and there are now fish which have attracted cormorants that found an ideal home on the island, providing as it did a supply of food in the lake around it and a safe haven from predators. At one time there were over 40 nests in the thorn trees all on top of each other, but their droppings have gradually killed the trees – a classic example of a species destroying its environment through over-population, and a lesson perhaps for the human population! If and when the cormorants have to vacate, it will be interesting to see what develops next.

By any account, the lake has been a great environmental success but it has only been made possible by profitable well managed agriculture.

Holiday Lodges

We have recently been granted planning permission to build 12 holiday lodges at Swanborough Lakes and have currently applied for planning permission to extend the Egrets Way cycle path from Spring Barn Farm along the east side of the C7, around the back of the garden centre and coming out opposite the Swanborough farm entrance, thus allowing direct cycle access to Lewes, avoiding the C7, for Swanborough residents.

It is planned to start constructing the holiday lodge site in late summer and hopefully have six lodges open for business by Easter 2018.