

Thriplow Farms

More sheep, less diesel

2014 Annual Report

I spent a few hours at harvest doing what I should have done several years back, and I read *35 Harvests*, which is my father's compilation of annual reports from 1974 to 2008. It showed me that some of the ideas we have now have been tried in the past - hopefully the bad ones won't be repeated. You'll notice there are quite a few references to old reports, so now you'll know why. One thing that struck me was the following line from 1979:

“One rather dismal aspect of the cereals on this farm is the continued advance of blackgrass. Three years ago it was only present on the chalk to the north of the farm but since then it seems to be advancing about one mile a year. This autumn we have noticed it on the hill at Duxford so we have now been gripped in a pincer movement.”

Given that this was back in the day when all the straw was burnt, it's fairly obvious that the rose-tinted spectacles are wrong; burning wasn't a failsafe way of controlling grass weeds after all.

The winter this year was as mild and gentle as it had been cold and horrible the previous year. That was great for those of us who live in un-insulated and single glazed houses, but maybe not quite so good for some of the crops, particularly the oilseed rape. The whole year seemed to be running about 3 weeks ahead of schedule, and harvest started on July 8th, one day later than our record.

Wheat

In 1999 we managed 10.75t/ha, this year it was 10.66t/ha. What was really unusual was the consistency: the worst field, HC 3, yielded 9.29t/ha, and the best was Smiths 23 at 11.45t/ha. I think the very kind and mild winter allowed all the crops to catch up and even

out more than they would have done in a normal year. I sold only a small amount for delivery at harvest because the price, £148/t, was very unexciting at the time. That looked like a great price in hindsight when the same amount left the farm in October for £103/t.

First wheats were Santiago (good), Conqueror (also good), KWS Croft (reasonable, and should be worth a bit of a premium) and Leeds (poor, won't be growing again). Their average yield was 10.78t/ha, but protein levels were very low. As last year we trialled some direct drilled wheat, but this year it was slightly more successful. Both fields yielded as we would expect from the historical data, and HC 8 was particularly pleasing as it managed 11.01t/ha with almost zero soil disturbance.

We also continued our trials of how to establish wheat after sugar beet. Last year the ploughed field yielded 1.7t/ha more than the min-tilled - a very significant result. This year though we were more careful in how the fields were treated at harvest to minimise soil damage. The results were very encouraging, and in both fields there did not seem to be any yield difference between the two methods - 9.79t/ha from 42ha. This year we are repeating the experiment for the final time, but with the addition of a small direct drilled section as well.

Second wheats were incredibly early to harvest, especially considering they were on the end of the farm which is normally very late. They were all cut in the month of July, perhaps 3 weeks earlier than usual. Both fields were Conqueror, and coincidentally they yielded exactly the same as the first wheats, 10.78t/ha.

Oilseed Rape

We started up the combine on the first field of rapeseed with real excitement; it didn't last long. A crop which had looked so good all year ended up yielding 3.22t/ha. Both of our first fields, which are side-by-side, produced this exact yield. One had been established with the StripCat machine we had on demo, the other with our normal system. Based on these results it's fairly obvious we don't need to spend money on a new machine, and in this instance more cultivation did not produce a higher yield. This was quite a surprise as the StripCat field had looked better all year.

Luckily things improved as we went on to the later drilled fields, hitting a high of 4.21t/ha on Foremans 2. This is a decent yield, but still quite a bit below our 2013 farm average. By far the biggest problem was the price. I said exactly the same thing last year, but then I was complaining that we were selling at £300/t - this year some went for as low as £237/t. Rapeseed has maybe made a small amount of money in 2014...as long as there is no rent to pay.

Sugar Beet

We are 2/3rds of the way through the sugar beet harvest, and it will easily be the most profitable crop we have grown in 2014. There are two reasons for this: good yields, and poor prices for our other crops.

Our first lifted field produced 88t/ha, which is good, but there were other farmers with 100t/ha+ crops at the same time. Our beet had an incredibly high sugar content compared to the average. Could that be due to being grown after a cover crop? We will never know, but it is not impossible. Our second field had much lower sugars (and no cover crop), but there was more bulk. It ended up yielding 94t/ha.

Next year the price we will be paid has dropped from £31.67/t to £24/t. This is really very uninspiring, and we will grow around a third less than in 2014. EU beet quotas are disappearing in a few years time, and if the price falls further then we will almost certainly stop growing it.

Beans

As anyone who has a 2014 harvest mug knows, this was our best ever year for beans. We grew Wizard winter beans as usual, some of which reached ludicrous heights of 7ft or more - and then fell over. This did not cause a big problem though, and they averaged 5.72t/ha. For the first time most of the Wizards were established using minimum tillage rather than the plough, and it worked very well.

For the first time in over two decades, we also grew Fuego spring beans. They were direct drilled into a cover crop that had been grazed by sheep, and looked excellent and clean all year. Despite being significantly shorter than the winters, they yielded even more - 5.86t/ha. Compared to the winter beans, establishment costs were lower, yield higher, and quality better (they sold for £20/t more than the Wizards), so it was a big success. However I am mindful of what happened last time we grew spring beans on the farm. These are extracts from the annual reports back then:

1988: Beginner's Luck. It happens every time with a new crop, and it happened this year with the spring beans we were growing for the first time. A yield of 5.4t/ha is beyond our wildest dreams...

1989: Like spring wheat, spring beans did as badly this year as they had done well last year. A yield of 2.4t/ha meant the crop made a hefty loss...

1990: A truly disastrous crop...both varieties produced 1.1t/ha...Next year we shall grow winter beans. We have learned our lesson.

We are growing 38ha of spring beans in 2015, although most of that will be after a late sugar beet harvest, so it will never be a great crop. We will have to wait and see if it is 1989 (or 1990) all over again. I would like to think that because we are now direct drilling the beans, they will be less prone to drought, which is their real Achilles heel.

Peas

For the third year in a row, peas (Prophet as usual) have been one of our best crops. The farm average of 3.93t/ha doesn't look terribly special, but it includes two fields that yielded 3.44t/ha. One of these was just disappointing. The other was great news because it was after very late lifted sugar beet. Normally we would just have just left this field fallow but this year it made a gross margin of around £800/ha.

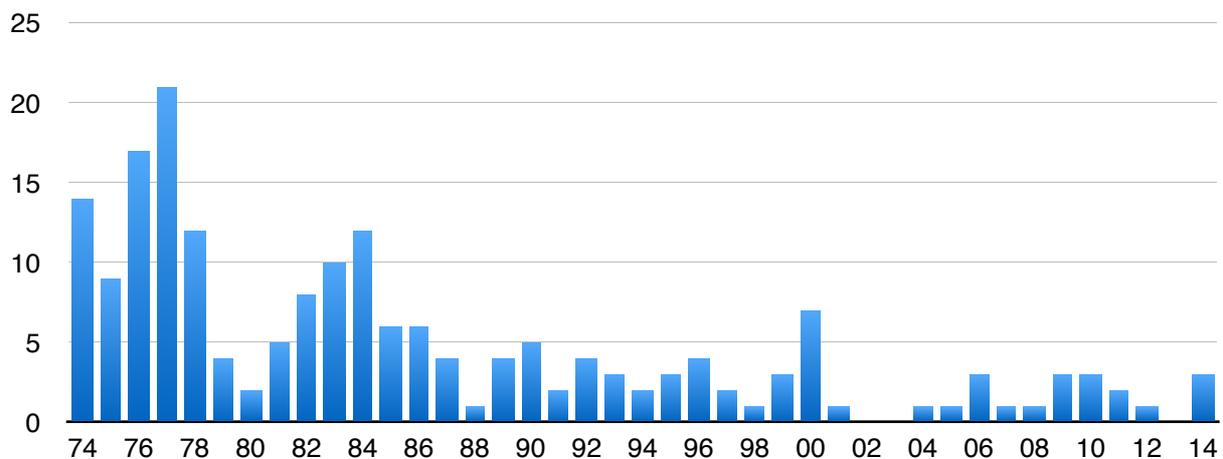
The other two fields yielded 4.29t/ha and 4.77t/ha. The first of these was direct drilled after a cover crop. My opinion of this trial is



obvious: 2015 will see all of our peas grown the same way. Unfortunately I think the pea party is over. Prices were over £400/t three years ago, now they are in the £200s. It was good whilst it lasted.

Machinery

Reading the old reports was an eye opener. Take a look at this graph of the number of machinery purchases each year since 1974.



Here's a little extract from the '76 report.

“A decision was taken to purchase all of 1977's machinery this autumn because of rising inflation and the falling pound. As a result the following list is, in effect, two year's worth of equipment. One important and rather depressing feature is the growing preponderance of foreign machinery which we seem to be buying. This is not because we are prejudiced against British machinery but usually because the types of equipment we need simply are not manufactured in this country. The following were bought (= foreign made): 1 Hagedorn self-loading trailer*, 1 MF 30 drill, 2 10 ton Brimont trailers*, 1 eight furrough Lemken shallow plough*, 1 Dowdeswell five furrough reversible plough, 3 Ford 6600s, 1 Ford 7600, 1 Deutz 8006*, 1 Deutz 1006 4wd*, 1 Berthoud 3000 litre 24 metre sprayer*, 1 Claas Rollant big baler*, 1 Claas Jaguar 60SF forage harvester*, 1 Gillibert forage box*, 1 MIL fodder box.”*

However, the plan to not buy anything in 1977 did not quite work out:

“The following machinery was bought this year: 1 Leyland Octopus lorry, 1 Deutz 10006A, 1 Deutz 8006, 2 Dowdeswell DP6 ploughs, 1 Ransomes TSR 109 plough, 1 8 furrow Lemken shallow plough, 2 19' Cousins cultivators, 1 6 metre Nordsten drill, 1 12 row Stanhay Beet drill, 2 12 ton Brimont trailers, 1 7 ton Brimont muckspreader, 1 28' Parmiter lift harrow, 1 Claas Dominant baler, 1 Claas hay tedder, 1 Krone mower- conditioner, 2 Dodge Simca vans, 1 Range Rover.”

Times have changed a bit now, but we did buy three bits of kit this year, all of which have been very good. 1 18t Richard Western grain trailer, 1 second hand Vicon fertiliser spreader and 1 Minibatt grain sample harvester.

Livestock

The Wagyu herd continues to grow, and I continue to have no real plan what I am doing with them. The total herd is up to about 60 now (doubled from 2013), and my first animals will visit the abattoir at some point in the coming spring.

I wrote last year that we had 1,000 sheep on the farm and next year there may be more. That turned out to be true, and the maximum number we hit in 2014 was 3,000. They have done a great job grazing the cover crops, and the shepherd is happy. He calls our forage “Rocket Fuel”. Three years ago we grew two fields of cover crop as a trial. This year we had over 200ha.



Top: Normal wheat on left, early drilled on right

Bottom: Before and after grazing the early wheat

Experiments

Last year I wrote about the experiments we were doing, almost all of which were successful. I've written about most of them already in the preceding sections. Our new fertiliser regime was not scientifically tested, but given our excellent harvest it cannot have been too much of a disaster. The herbal grass ley I wrote about has been doing well. The biggest problem was that I do not have enough cattle to utilise it properly at the moment. This year we have moved on to new ideas, here are some of them:

- Companion Cropping - Oilseed rape has been planted with buckwheat, lentils & fenugreek. These other plants should out-compete weeds and fix nitrogen for the rapeseed. I had also hoped they would reduce the damage from flea beetle, but that did not seem to happen. We used no pre-emergence herbicide on this field, saving £70/ha, which would have been money wasted as there are very few weeds.

- Grain Maize - The last time we grew grain maize was in 1975. The annual report had this to say about it: *“We attempted to grow maize for grain this year. The less said the better, other than the fact that we shall not be growing any next year”*. I'm hoping that the last 40 years of plant breeding has made it a more reliable proposition in our climate, but I do not expect super yields from the very early variety we will grow and hopefully harvest wet at the beginning of October. One of the exciting things about growing maize is how late in the spring it is drilled, which means we can grow a crop of ryegrass for silage before it. Two crops in one year is unusual in northern Europe.

- Grazing Wheat - A small section of HC 1 was drilled with wheat in August, around a month earlier than usual. In December it was grazed by sheep. We will see if there is any effect, positive or negative, on the yield. We had also intended to graze some rapeseed, but due to an oversight it was sprayed too soon which meant we could not put the sheep on. Oops.



Oilseed rape with companion crop

- Wide Row Wheat - Two fields have been direct drilled with wheat spaced on 250mm rows, which is around double what we normally do, and half again as much as is generally considered sensible. The potential benefits are lower diesel usage and less soil movement. So far they both look excellent.

I've written about these and a couple of other ideas on my blog at <http://ooofarmer.wordpress.com/2014/09/11/whats-happening-at-home-first-edition> for those who are interested in more detail.

The future

Who knows what is going to happen to prices this year; they still make by far the largest difference in how much money a field makes. It's better to be a bad farmer and a good marketer rather than vice versa. We would like to be both.

The subsidy scheme is changing soon, and farms are having to do more environmental work to qualify. We're in a good position because we grow lots of legumes, have plenty of hedges, and miles of wildlife strips. I'd also like to think that soon we can start spending less money on diesel and expensive chemicals; if this year is anything to go by we won't need as much of either as we thought.

I've spent the last year travelling for my Nuffield Scholarship. I won't bore anyone with the details here as there are 50,000 words about it (and some photos) on my blog at www.ooofarmer.com for people with insomnia. For anyone who wants even more frequent updates, you could always look at @ooofarmer on Twitter.

David Walston

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