

# Thriplow Farms

## Flattering to deceive

### Annual Report XLIII - 2016

So, the first year without any cattle of my own - and life was a lot less stressful. But that didn't mean we had no cows, as for the second year a bunch of small dairy cattle turned up to graze for the summer. And to be honest, they did terribly. We can do the post mortem a couple of pages further on, but to begin with everything was poor, only to look much better later on, and then finally the end result was a disappointment. This would also be a pretty good way of describing the rest of the farm this year.

Once again we had a warm winter, bizarrely so, the highlight of which was probably mowing my lawn at the start of January, and having to be careful to avoid the daffodils. All of the crops had gone in pretty well, but the lack of any meaningful frosts was building up a mollusc shaped problem that has plagued us for the whole of 2016. Spring was, again, late and cold. We waited patiently to get drilling, but eventually my resolve broke and we started work. It kept on being cold after this, so the plants didn't grow very well, and were a sitting target for plenty of just-about-controllable slugs (these were the molluscs I referred to earlier).

From about mid April, the next two months were just about perfect. Towards the end of this time, we needed a bit of rain, and the weather gods obliged. The problem was, they kept on obliging for the whole month. And where there is rain, there is a lack of sun, the other half of a plant's growth equation. Rain is always our limiting factor here - but in 2016 it was too much, rather than too little that ultimately did for us.

#### **Wheat**

Every year we have a sweepstake before harvest, in late June, centred on how well the wheat will yield. This year it looked, to most peoples' eyes (including my own) to be mega. Even our fields drilled with wide rows had filled in, which is always a good sign. In fact, at one

point things looked so good that an unnamed person was predicting an average yield of over 11 tonnes/hectare. In the end we all guessed somewhere around the 10-10.5t/ha mark, apart from my Dad who guessed 8.4t/ha. We all scoffed - was he blind? As harvest rolled on, and the best fields were still to come, I was confident. But these “best” fields yielded no more than the others, and the final result was 9.1t/ha, some 0.5t/ha less than our 5 year average. We managed to convince my Dad he hadn’t won the sweepstake, as the guy who repairs our grainstore had guessed 9.7t/ha, although he was never a real part of the sweepstake. Luckily the winner never reads my reports, so the secret is safe for now.

The problem was that although the wheat looked really good, the unrelenting wet weather and lack of sun in June meant that the top third or so of the ears didn’t actually contain any grain at all. We peaked early on, with a field of Reflection being grown for seed which yielded 10.73t/ha. Amusingly, this field had looked rubbish all year, as it got covered in a yellow rust infection over winter, but obviously that wasn’t such a problem after all.

All the rest of the first wheat was fairly similar, starting with some Conqueror on HC 3 which did 8.61t/ha, KWS Lili on HC 8 that just made 9t/ha, KWS Croft did 9.1t/ha, and Evolution on Church came in at 9.99t/ha. Our second best field was up at Foxton, where we averaged 10.41t/ha - once again with Reflection. It is strange that this variety did so well, as all over the country it looked bad (according to Twitter at any rate); so much so that our crop that was expensively grown for seed remains in the shed in December, as no one wanted to plant it this autumn.



*Two ears of wheat from Rowleys, one with BYDV, the other without. Not a good recipe for high yields*

On one field, Rowleys, we tried growing a mix of four different varieties. It was a disaster, and succumbed to some combination of BYDV (a viral infection carried by aphids) and yellow rust. This field had received no insecticides at all, but unlike the two other fields where we did the same, HC 3 & 8, here we paid the price. It yielded a horrible 7.48t/ha.

Second wheats were a bit of a mystery. They were all the same variety, Santiago, planted on the same day, on three fields close together (two were immediate neighbours), and all treated almost identically all year. They yielded 7.69, 8.68 and 9.14t/ha, a huge, and unexplained, variation from what are normally some of our highest yielding fields.

Finally, we had a couple of fields which had been sugar beet in 2015, and in the autumn of that year had wheat seed thrown onto the surface, and then mixed in with a set of discs. They actually did pretty well considering, and yielded an average of 8.90t/ha.

## **Barley**

I'm going to go crazy and mix things up now. Usually I would write about oilseed rape, but instead I will go through the crops in descending order of how much we grew in 2016.

Winter barley made a return, the first time we have grown it since 2002. There were two fields, HC 1 & 4, both growing KWS Tower. They both looked really good all year, until HC 1 came down with a bad case of BYDV in the spring - again, we didn't use any insecticides on this field. Unfortunately the weather really did for us in the summer, and what had looked excellent at one point in the end average 7.47t/ha, with a poor quality that means it will not sell for as much as normal. HC 1, with its BYDV yielded 0.7t/ha less than HC 4; I think this would have been a much more pronounced difference had the yields not been hammered so much by lack of sunshine.



*Winter barley, pictured here in happier times*

We grew even more spring barley this year than in 2015, and in some places it was the second year in succession. Again it was all the malting variety Propino. There were three fields, Foremans 1, Smiths 1 & Januarys 2. The first two of these suffered badly from slugs, in particular Smiths 1, which in some areas probably lost half the plants. Januarys 2 was so



*This is what the worst bits of Januarys 2 looked like after drilling, and then the same area a month later*

horrible when we drilled it, that it was necessary to run a set of discs over the ground afterwards. This made a good job and seemed to control the slugs as well. The first field to be harvested was Foremans 1, and when that yielded 6.44t/ha, it seemed pretty good, relative to what it looked like in the spring. Smiths 1 was predictably very poor at 5.30t/ha, and entirely my fault as I had been so negligent about the slugs. Then came Januarys 2, which I was waiting eagerly for. It was easily going to make 7.5t/ha; there were loads of plants, big ears and plump grains. What the hell happened...6.03t/ha? Quite a lot fell on the ground, but not that much. I can't explain this one, so chalk it up as another 2016 mystery. Overall the spring barley yielded 5.96t/ha, which is low, but with quite good quality.

### **Oilseed Rape**

Our rapeseed yielded 2.54t/ha this year, which believe it or not is not too bad for the year, even though it is a long way below our 5 year average. I find that farmers are so het up about flea beetle that they all assume that is what has been the problem. Well, I'm sure it has been a bit of an issue, but by miles the biggest problem for us was pigeons. I'd guess we lost around a third of our entire crop to them - in one 45ha field almost a third of the entire area was un-harvestable as there were no viable plants, and in a small 4.5ha field there was less than a hectare to combine.

I had also thought the weather played a big part, and that higher yields were just not possible. That idea was knocked on the head when I saw yield maps for one field, where several hectares in the middle had yielded up to 6t/ha. Interestingly this high yielding area stopped very precisely along an old field boundary, so the difference was in the soil, and not due to pigeons, insects or the weather. I suspect it was a soil-borne disease, but maybe it was something to do with nutrients.



*Oilseed rape in the early spring, after a bit of pigeon love. If it had stopped here then the crop would probably have been OK - unfortunately they kept on going until there was nothing left*

Both the varieties we grew, Picto & Campus, are conventional, meaning we can save the seed to grow next year, which is quite a cost saving. Neither seemed to be particularly better than the other, so they are both being used again. All of our rapeseed is grown with some form of companion crop, normally vetch, buckwheat and fenugreek. We did find that where the vetch grew tall it had *some* effect in keeping pigeons off the field, but not enough in a year like this when the pressure was so high. Unlike a lot of farmers, we are not only still growing rapeseed, but we have attempted to increase our acreage. I say tried, because one of the fields was annihilated by slugs first, and then fleabeetle the second time. It is now a field of beans. But that will have to wait for the 2017 report.

## **Beans**

Ah, spring beans. Sorry to be boring, but they looked so good! For the third year we grew Fuego, and in June they were excellent. Big plants, flowers all the way up the stems (see photo on right), no weeds. But beans need insects to pollinate the flowers, which in turn set into seeds. When the rain started in June, and kept going for three weeks, the bees stayed at home, and so come harvest time, there were no pods at all on



the top half of the plants. The final result from 50ha was 4.48t/ha. That's actually not too shabby, but it suffered in comparison to the year's nicest surprise...

Winter beans, and the old faithful Wizard variety. Hallelujah, finally something to smile about. The top end of our spring bean field had winter beans in it, which yielded almost 1t/ha more, at 5.46t/ha. Our second field made 5.20t/ha, giving an average of 5.30t/ha. Somehow we really lucked out here, as most beans in the area were terrible and full of weeds. It's a shame they aren't worth any money though.

## **Oats**

By this point you may be noticing things are going on somewhat. We grew eleven crops this year, so sorry about that. I'll keep it short.

For the first time in living memory there were oats at Thriplow Farm. One field was grown for seed, with the variety Mascani. It looked great, and yielded like !%&\*. 6.39t/ha is about 3t/ha less than I had hoped for. On top of that they were very poor at controlling blackgrass, and so we spent a fortune having it pulled out by hand.

On HC 9 there was the country's first commercial crop of the spring oat variety Elyann. This is a crop that really seems to suit our no-till system, and it roared away after being planted at the end of March. It actually out-yielded its winter cousin next door, with 6.88t/ha, and a quality that made the millers happy. They wanted us to grow another 250ha this year - we settled on 25.

## **Peas**

This year we said goodbye to the large blue pea Prophet, which we had been growing since 2008. It always did well here, but the price disintegrated, and so we have moved onto Sakura, a marrowfat variety used for making mushy peas. We had two fields, one of which suffered badly from slugs, which shows how bad they were in the spring, as peas are not normally on the menu. This one yielded 2.79t/ha, and the other field managed 3.23t/ha. Our average of 2.95t/ha was, according to our local pea buyer, above average for the year.

## **Linseed**

Another first for us was spring linseed. This is a late drilled crop, at the end of April, and the weather all year suited it very well. I had been warned to expect about 1-1.5t/ha, and Dick, who drives the combine, was a bit terrified of having to deal with it at harvest (it's notorious for making combines spontaneously combust). We took some advice and decided to kill it off nice and early, and give it time to dry out in the field, which makes the straw a bit more brittle and easy to handle. In the end I think we were a little bit too early still, but it went OK, and with no flames in sight. The end yield was 2.14t/ha, which was so good I've decided to quit whilst we're ahead, and not grow it again.

## **Grain Maize**

Just when I thought grain maize couldn't be any worse than 2015, I was proven wrong. Last year we planted too late, this year too early, although only by about four days. For some unknown - and we've had the experts in - reason, we had effectively no seed germination at all. Not slow, not late, but none. By the time this became undeniable, it was too late to re-drill, so I planted a July cover crop. At least that did well, as seen on the photo here.



## **Livestock**

Last year the cattle that turned up were a bit of a nightmare. First of all they broke out of a field within 10 minutes of arrival. Then their eyes went all funny, and we spent hours trying to fix the problem. Finally, several had come from farms in the south west, and were being called for TB tests. None of which are ideal in the middle of harvest when there's other work to be done. This year it went differently. The animals were smaller (as I requested - not sure it was a good idea in hindsight), and had a great temperament. The negative points were mostly related to death. One within a few days from pneumonia, and another a month later. Then one's aorta exploded. None were my fault, which is the main thing. When in May their

eyes started to get infected again, enough was enough. Although it goes against my religion, I had to get the topper (that's what we call lawn mowers in farmer-land) out, and cut the grass. The tall cocksfoot was scratching their eyes and making them susceptible to flies. This did cure the problem, and it also meant that the grass was shorter, and easier to eat for these hand-raised animals with no idea how to graze. During their stay they were all weighed three times. In the first few months there was really no gain at all - probably due to poor grass quality from no sun or warmth. As the year moved on they got much better, with some animals gaining over 1kg/day. But it was too much ground to make back, and after six months the average weight gain was around 0.33kg/day, yielding us about 236kg/ha of beef, compared to 327kg/ha last year. Both of these numbers are very poor.



That concludes the cattle experiment on Thriplow Farms for the time being, as we have now turned the field back to cropping, where a crop of beans was sown in early November. In a mere four or five years we should have an idea of whether it was worthwhile or not.

Once again we have sown a lot of cover crops after harvest, but the conditions have been very bad for them, easily the worst I have seen. There was no rain to speak of during harvest (which made combining very quick), but it also meant cover crops didn't want to grow. We finally got some rain at the start of September, but too little, too late. To make matters worse, my normal sheep grazier retired. A neighbour has stepped in to graze our pathetic plants, but only because his turnips didn't grow either! I would expect to have around 3,000

sheep on the amount of cover crop we have planted, but it will be more like 500 this year, which shows how bad the autumn was.

## **Machinery**

The Horsch sprayer we bought last year has performed really well, with a few niggles. The booms and nozzles are really clever bits of kit; one of our neighbours has bought one after taking a look at ours. The move from two sprayers to one has been easy, with our single machine only doing around 400 hours work in the year, somewhere between 1/3 and 1/4 as much as sprayers often do on other farms. This is a very luxurious position to be in, but it does mean that we have great flexibility and everything goes on at the right time. Still, we remain very over-equipped in this area.



*Night spraying, in a futile attempt to save a field of oilseed rape*

After our move away from cultivating soils last year, I've been hankering after a disc drill to complement our 16 year old tined Horsch machine. These machines disturb less soil, and also give the ability to drill into much more plant residue, which is cut by the disc instead of bunching up around a tine. There are quite a few machines on the market, the most established being the John Deere 750a. We had a demo of one of these back in 2013/4 and it did a good job on our lighter land, but I was skeptical about what it would do at the other end of the farm, where things aren't quite so easy. To cut a long story short, by a happy coincidence, we ended up with a 750a and a New Zealand Cross Slot drill in the same field on the same day. Although I'm sure it wouldn't happen like this on every occasion, the 750a ended up out-yielding our old Horsch, and the Cross Slot, by 0.4t/ha. There are thousands of words written about it on the farm blog, link below, but the bottom line is, we have bought a 6m 750a which will be here in time for spring drilling.

<http://thriplow-farms.co.uk/2016/08/20/cs-vs-750a-the-grand-finale/>

## **Experiments**

We are actually pretty light on experiments so far this year. The one I was most excited about in the last report was where we grew lucerne under our oilseed rape, with the idea it would stay there and then we could plant the wheat into it this autumn. It looked to be going well, until after harvest the slugs ate it all. Maybe it will reappear in the spring? We are also looking at the following bit and pieces:

- **Bi-cropping:** We tried this last year by spreading some spring rape onto our peas after the fields had been drilled. I didn't see a single rape plant come up, so that was a waste of time. I would like to try it again however, and also perhaps peas and spring barley.
- **Companion cropping** - we are fiddling with the mixes, and have tried Berseem clover this year in addition to normal vetches.
- **Fungicides** - KWS seems to be doing a good job of breeding varieties of what with good disease resistances, and I am keen to try reducing, or even eliminating, fungicide applications to see what happens. They say not to do it, but they would, wouldn't they?
- **Agronomy** - as last year we have two agronomists. Last year the decision not to spray insecticides on the wheat and barley in the autumn was probably a mistake, given how warm the weather turned out to be. But I am not dissuaded, and we will try again. Already there have been several hard frosts at the start of December, which is a good sign.

## **The future**

In the short term, we have a bit of a change, as after a one year sabbatical, sugar beet will be grown again here next year. I'm glad we didn't grow it in 2016, as the price was terrible and yields have been poor. It looks a bit better for next year though, and I'm hopeful that we have found a way to grow it without using a plough, which is always nice.

Brexit, boring Brexit. I don't know what's going to happen, as anyone who saw BBC Look East on December 6th will realise. It's actually been pretty good for us because a weaker pound means all our our crops, which are priced in euros or dollars, become more valuable. We are due to sign up for another 5 years of Higher Tier Countryside Stewardship later this month, although the final forms are noticeable by their absence. Subsidies are the bigger

question, I can't see them continuing as handouts as happens now. But will the government be happy to let the UK's farms implode by going cold turkey in a few years? Maybe, we will have to live with whatever happens, just as we do with the weather. If we do go down that route, I think it is fair to ask that any food imported into this country be produced to the same standards that we have to follow. After all, if some chemical or practice is outlawed here for being harmful (which may be justified), then it's just not reasonable to have it coming in from another country instead. Brexit brings with it plenty of opportunity for the farming industry, but only if handled correctly by the powers-that-be. And who really trusts them to do that? Not me!

David Walston

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*A pollinators' dream of flowering phacelia*