

NEWSLETTER

# Wildlife Matters



Pertwood  
Organic  
Farm

SUMMER 2018

## WELCOME TO THE LATEST EDITION OF WILDLIFE MATTERS

It's more than the title of our newsletter, it embodies the whole relationship between our farm, our crops and the fragile ecology of our landscape. We are fortunate that through good advice, excellent husbandry and a wonderful landscape to begin with, both plants and wildlife are thriving at Pertwood.

Naturally, the farm needs agriculture to pay its way but we have proved that the growing of crops can happily co-exist with nature and, through sensitive planning and management, endangered species are establishing themselves at Pertwood in highly satisfactory numbers; birds, insects, mammals and plants.

We hope you find this issue interesting and educational and perhaps other farms might realise that the land is not simply there to provide an income for them; it is a serious responsibility to look after it for future generations.





# SUNFLOWERS



*Sunflowers in Pig Down being admired by the cows!*

We have been astonished and delighted by the number of unsolicited emails we have received from members of the public driving along the A350 past the farm. People are so happy that we have “brightened up their day” with our sunflowers, cosmos and phacelia (plus other wildflower varieties).

An added bonus of the wildflowers is that the insects enjoy this late nectar and pollen bonanza. Bumblebees and honey bees are feeding in the flower heads, here’s a buff-tailed bumblebee covered in pollen busily gathering food.



*Wasps and ladybirds were finding and eating black fly larvae on the stems. Here’s a seven-spot ladybird.*



*This final bumblebee looks like she’s been rolling in the flower!*

## HONEY BEES MAKING A BUZZ

I’m sure some of you will have heard Lower Pertwood being mentioned on the local TV and Radio. We are getting an increasing number of requests to come to the farm so they can interview Johnathan from the Natural Beekeeping Trust (who we were lucky enough to approach us about hosting the first tree hive), someone from the farm to discuss what it means to us to have the hive at Lower Pertwood and of course to record the stars of the show, the honey bees.

Since the last newsletter, we have had a French film crew, Radio 4, BBC Points West and BBC Wiltshire visit.



If you are interested in seeing us making the tree hive, finding out why we wanted to do this and most excitingly see the bees arrive, please look at this [YouTube video](#) courtesy of the Natural Beekeeping Trust.

You can look forward to lots more about the flowers in the next newsletter and keep an eye on our website [www.pertwood.co.uk](http://www.pertwood.co.uk) for updates in the meantime.



## LATEST NEW BIRD SPECIES SEEN AT LOWER PERTWOOD

In mid-June when I was completing the breeding corn bunting survey (more on that later) I passed by the Windmill Triangle, an area of scrub on southwestern edge of the farm where I heard the familiar, but unexpected song of a reed warbler.

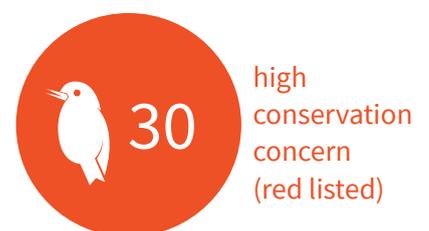
As the name suggests, this is a species usually seen in wetland areas, and almost always singing from reedbeds. This one however was a good mile or so from the river Wylde and singing from a hawthorn bush. They are a secretive species that can be hard to see, they rely on their song to advertise their presence rather than their plumage or display. Here's a picture I took of one in more typical habitat.

As you can see, they are pretty sneaky and well adapted to their usual habitat.

This species has been one I thought Tim and Richard would catch when doing their bird ringing, especially in the Autumn when the juveniles are working their way south through the countryside. At this age they seem to take advantage of a larger variety of habitats. So typically, the guys did indeed catch a juvenile recently. They are that elusive it managed to evade the cameras even though they had hold of it!

This takes our bird list to 109 species. Thirty of these are of high conservation concern (red-listed) and 23 are of conservation concern (amber-listed). This means 53 of the bird species we have recorded at Lower Pertwood in the last four years are of at least some conservation concern, that's 49%.

We have proven 60 species breeding, which is a fantastic result. So far...





The following article is a summary of a longer report (available on our website) written about our work to help corn bunting. It seems to be working!

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## CORN BUNTING SURVEYS

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### BACKGROUND

The corn bunting *Emberiza calandra* looks a little like a chunky sparrow. It is a bird of farmland, breeding in cereals and grassland, then wintering on areas of stubble and grazed grassland, often within a mile or two of their breeding sites. Once a familiar bird, whose male call is likened to the jangling of a bunch of keys, it has now severely declined according to a number of sources.

The Bird Atlas 2007-2011, the most recent UK-wide survey of all bird species, suggests this species has undergone a 90% decline in the period 1970-2010. This decline continues across the UK.

Because of their sedentary nature, as the population declines, areas where the birds survive become isolated from other similar areas. It's a bit like the tide going out and being left with rock pools. Fish in any particular rock pool have to stay put, unable to move until their habitat requirements return with the next high tide and they are able to move around again.

Wiltshire is perhaps the deepest rock pool in the UK for corn bunting, and at the bottom of that rock pool, Lower Pertwood Farm.





# WINTER SEASON SURVEYS

An annual rolling winter survey is now conducted of all viable wintering farmland bird habitats with the numbers of all species noted. This method helps keep track of the different flocks, species like linnet *Carduelis cannabina* tend to be more mobile than corn bunting, but with regular counts they can be kept track of. Work commences in January and carries on throughout the Hungry Gap until the end of April.

This is the most dynamic period for corn bunting during the winter. Initially, there is much available habitat around the area, with about 25% of the cereal growing area on most Conventional farms in overwinter stubble. However, on Lower Pertwood in the first half of the winter this can be as high as 75%.

Areas of overwinter stubble are fields that have not been worked since the previous crop was harvested, these criss-cross the countryside at this time. Corn bunting prefer larger fields where the arable plants appearing in the stubble are left to grow. On an organic farm that's pretty much all the stubbles. These areas are largely removed by the end of February elsewhere, they can stay at Lower Pertwood well into April.

Grasslands can be important to corn bunting during the winter. The organic rotation includes fields that are put into Rye Grass/herb leys. The current leys contain either red clover, white clover or sainfoin. It seems red clover leys are favoured by the corn bunting, especially in March and April.

The peak number of corn bunting recorded at Lower Pertwood Farm over recent winters is as follows:



The general trend is upwards which is great news and as previously mentioned, opposite to the situation in the wider countryside!

The 2016/17 total may seem a bit high, but because of the methodology of the work this was shown to be a reasonable reflection of the population. The reason appeared to be an increased movement of birds to Lower Pertwood late in the winter due to a lack of available habitat in adjacent farmland.

In contrast, the 2017/18 winter had much higher than usual levels of suitable wintering habitat well in April, because many overwinter stubbles were too wet to be sprayed off, let alone cultivated. This meant the corn bunting on the farm that winter were virtually all looking to breed on Lower Pertwood Farm.

But would this be shown to be a reasonable assumption in the breeding season?



# BREEDING SURVEYS

The initial survey was completed in 2015 and was repeated in 2018, using the same routes and methodology as 2015. Some additional conventional farmland had been acquired in the 2017/18 winter, this was surveyed using the same methodology. The results showed some interesting differences compared to organic farmland (more on that later).

The results of the two surveys were as follows:

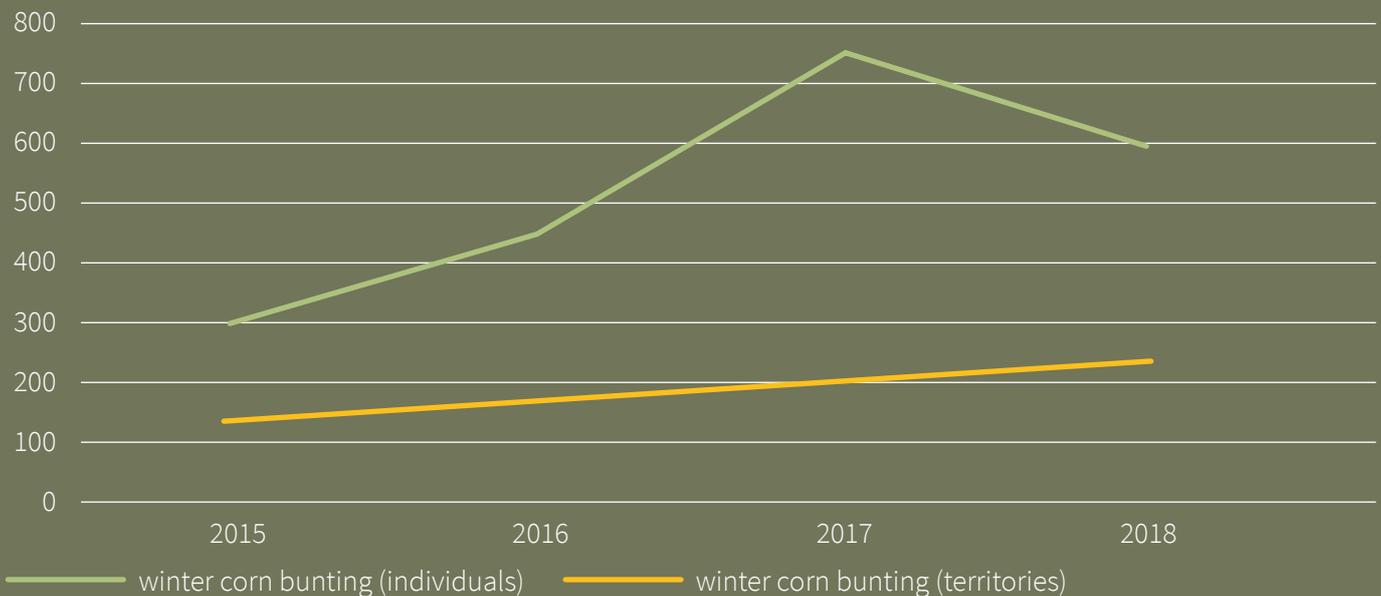
2015 – 132 territories (appendix 1).

2018 – 235 territories on the same area, 262 in total (appendix 2).

This is an 87% increase in the number of corn bunting territories in three years.

The increase in the two parts of the year is largely the same, as shown on the graph below. It is important to note that the breeding season figure is in territories (on average, two birds in each) and the winter season is individuals.

## CORN BUNTING NUMBERS ON LOWER PERTWOOD FARM



Both the winter and breeding period surveys highlighted the extremely positive situation of the corn bunting population at Lower Pertwood in comparison to the national picture.

The main report discusses the reasons for the success at Lower

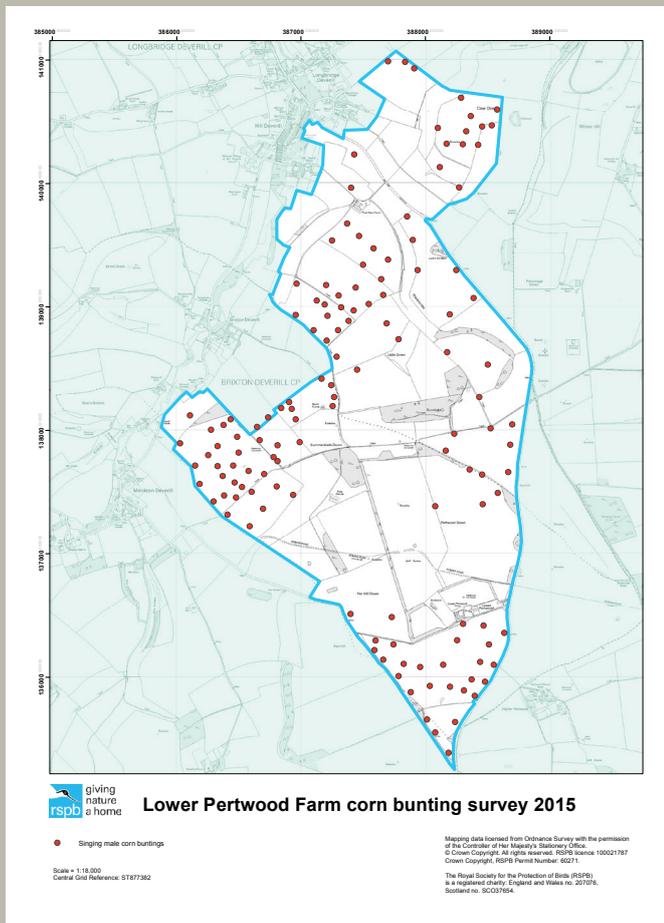
Pertwood and how this might be replicated across the wider countryside. I'm sure you will be pleased to hear it looks like the 2018 breeding season has been a good one. We have two main crèche flocks (the fledged chicks band together while the adults are

moulting and unable to fly well). One flock totals c200 and the other is c300, they are really hard to count as the flocks tend to be all over the place, they have yet to learn to move in a coordinated way!

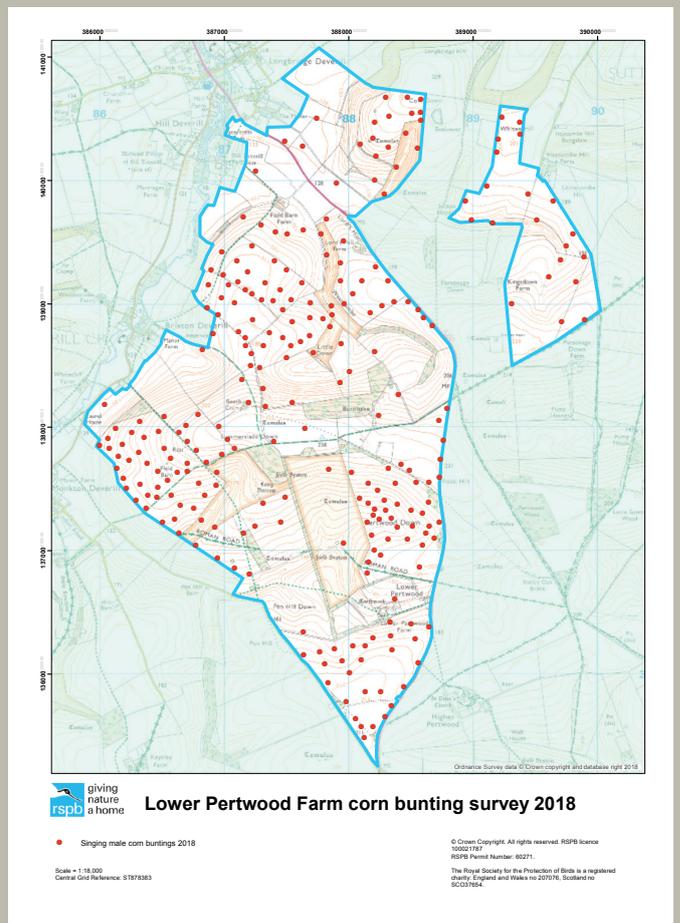
# BREEDING SURVEYS

## APPENDICES

### Appendix 1 Lower Pertwood Farm 2015 corn bunting territories



### Appendix 2 Lower Pertwood Farm 2018 corn bunting territories





# YEAR OF THE BUTTERFLIES

With the prolonged dry and warm weather, a number of insects and in particular most butterflies looked to have had a decent year. The ones on Lower Pertwood Farm certainly seem to have anyway!

We recorded our 30th butterfly species this year, a significant achievement given the relative lack of woodland on the farm.

**Wall brown** have been seen in small numbers at several sites, hopefully this will be the start of a sustained period of occupancy. It's a species I see on occasion, especially near where I live at the Wiltshire Wildlife Trust's Morgan's Hill reserve, but it feels like they are having an excellent year.

Another species that has occurred in exceptional numbers for us is the **Silver-washed fritillary**. Previously I have seen a singleton in September, by which it was very worn out and considered to be a wanderer from a nearby colony. It's very exciting to report that we have a colony breeding on the farm in Marriage's Gorse. Our maximum count of 25 suggests they will hopefully be a more regular summer highlight going forward.



*This first picture shows the typical colour form, what a stunner! The second photo shows the rarer greenish form valezina. Both pictures taken on bramble in Marriage's Gorse.*



*Brown argus resting in Little Coombe*

**However, the highlight for this year so far has to be the butterfly bank and the number of brown argus we have recorded there.**

The butterfly bank is made from the residue left from Wessex Water making a reservoir on Lower Pertwood. It's been designed roughly along the lines of ones made by the RSPB at their Winterbourne Downs reserve. It is around 118m in length and lies east-west giving a south facing side to catch the sun and a north facing side to give shelter. At each end there are curls to give further variations to catch the sun and offer shelter. There is not topsoil on the bank, just subsoil made up of a mix of chalk and clay. This means that it's harder

for the more aggressive species like dock, thistle, nettles etc to establish, giving us the opportunity to grow plants that are foodplants for some of the rarer downland butterfly species we are lucky enough to still have on and around Lower Pertwood.

The key species of plant we are trying to encourage, with the species of butterfly that benefits in brackets afterwards are kidney vetch (small blue), horse-shoe vetch (chalk hill blue & Adonis blue), rock-rose (brown argus), bird's-foot trefoil (brown argus & common blue) and devil's-bit scabious (marsh fritillary).

After two growing seasons the hoped-for plants are really starting to take grip.

We have been spreading seeds and plant plugs of these species (thanks to RSPB and Cranbourne Chase AONB for helping with the seed and plugs).

Such has been the success of the kidney vetch that we have harvested three carrier bags of seed that will be used to fill in gaps on the butterfly bank and spread the plant to other suitable sites on the farm. We are just about still in the second-generation flight period for small blue, so fingers crossed there will be some egg-laying as I type.

We also have around 50 plants of both rock-rose and horse-shoe vetch, the former helping to attract at least 25 brown argus to the butterfly bank – brilliant!

Here are some pictures of the flowers at their best on the butterfly bank:



*Kidney vetch*



*Rock-rose*



*Horse-shoe vetch*

# A DIFFERENT STYLE OF FARMING

The newsletter content has been predominantly about the Wildlife on Lower Pertwood, with the occasional mention of farming. We'd like to talk about something we are going to be doing that's aimed at increasing the farm's crop yields, but of course always taking into account what impact this might have on our wildlife.

I am by no means a farming machinery expert, so apologies in advance to those of you that are, if my terminology is not spot on. However, for the majority of our readership I suspect if I can understand what is going on, you will be able to as well!

As I've mentioned in the past, we get a lot of plants growing in the crops, I guess I should call these arable

weeds. The definition of a weed, for me at least is a plant growing in the wrong place. Weeds are pioneer plants that grow where the soil has been disturbed i.e. they are often the first plants to establish themselves to cover open soil. The wildlife does like these weeds, the honey bees collect pollen and nectar from them and the corn bunting love them as song posts.

Weeds are part and parcel of crop-growing, we will always have some, but if we can find ways to reduce the numbers so that less moisture and nutrients are taken up by the weeds, the crops we grow would benefit and yields would increase. Better weed management would result in a win-win as there would still be the odd singing post for the corn bunting and some poppies for the bumblebees to feed on.



*A male corn bunting using a dock as a song post in Pig Down*



Anyone visiting the farm this year might have noticed some of our oat fields seemed striped as this picture illustrates.

The reason for this is we have planted the oats differently here to previous years. We have drilled the same amount of seed in the field, this year the gaps between the rows are ten inches instead of about five inches, to compensate for this we have planted more seed in each row. Therefore, we have less rows of oats, but more oats in each row. This means the rows are thicker and as long as the cereals grow ahead of the weeds, the weeds cannot compete in the cereal rows and will struggle in the larger gaps because of the cereals being ahead.

As we can see from the picture above, the oats are doing well and growing faster than the yellow charlock, so instead of having a fairly wall-to-wall yellow field at this stage, you can clearly see the green oats and the yellow charlock between them.

**By encouraging the weeds to grow between the rows, it allows us to weed the crop. This is to be done with an inter-row cultivator.**



The crop in the picture above is too far established to be able to cultivate between the rows of oats. In order to successfully control the weeds this would be done at a very early stage when the plants are still quite small. The cultivator we have has a camera and computer on board that allows it to recognise the rows of crop (planted nice and thick remember) and it then deals with the weeds between the rows – amazing stuff!

At this stage of the cereal's development the skylark and corn bunting are not nesting in the crop, there is not enough cover for them, therefore there is no danger of destroying their nests. Once the oats start to develop stems as well as leaves, the tractor wheels would be doing too much damage to the crop so this work will stop.

We won't get rid of all the weeds, it will take some out, knock others back but will mean

the oats become established first.

By the time the corn buntings are looking to nest there should be a low cover of weeds available to nest in.

We didn't do any weeding this year other than a short test to ensure it was working. Our anecdotal observations based on the last three years suggest the skylark liked the new wider planting a lot, we don't usually have many nesting early in the season, but this year they piled in. The corn buntings were not put off and late in the breeding season there was a flock of c300 in Windy Ridge alone! There were some adults working in second broods, but mostly this year fledged chicks.

We will continue to monitor in future years the impact of the inter-row cultivator, but at this stage we are confident the impact will be positive on both crops and the wildlife.

## WE'D LOVE TO HEAR FROM YOU

As a passionate organic farm, we believe in sharing information in the hope that we all learn from it. If you have read some of our ideas and adopted them on your farm or in your garden, please let us know! Every gardener and farmer, from neophyte to old-timer, has a metaphorical bag of tricks: a diverse collection of clever strategies, techniques and tools that help them save time, frustration, money – please share your experiences with us.

Write to us via Louise at email [louise.norton@pertwood.co.uk](mailto:louise.norton@pertwood.co.uk)