

Wildlife Matters



JUNE 2020

Wildlife

We are living in strange times that none could have envisaged six months ago. We had a very wet winter which was of concern for our owls and kestrels. Barn owls in particular need dry weather in which to hunt and a good supply of food in order to gain sufficient weight to breed. In March the weather changed and as “lock-down” in response to the coronavirus Covid-19 began, we were blessed with warm sunny days, ideal conditions for breeding barn owls and kestrels.

What we were not allowed to do, however, was check nest boxes with the instruction of “stay at home” confirmed in relation to box checking by the British Trust for Ornithology [BTO]. Most of the results of avian survey work and nest box checks in the UK are held by the BTO and used to inform conservation matters, safeguarding species, planning and environmental policy to name a few.

As soon as the restrictions permitted in mid May and

with the consent of the farm, we began our checks of barn owl and kestrel boxes. We were delighted by what we found: a kestrel on 6 eggs; three pairs of barn owls with either eggs or young and a further pair in a field adjacent to the farm. Some pairs were still in the process of laying their eggs but at that time of checking we found four young and ten eggs.

There are likely to be several pairs of breeding tawny owls on the farm using natural sites but one came to our



Photo credit: Hayley Mole



attention when a young tawny fell out of its nest and ended up on the ground. From about a month old, tawny owlets engage in “branching”, this means they move out of the nest and walk around the tree, usually at night; sometimes they fall to the ground. What should you do if you find an owl on the ground? This depends on the species. If it is a tawny it should be placed on a branch, the adult will find and feed it. The parent would feed it on the ground but it could become the victim of predation, so it is safer to put it on a branch. Barn owlets should be returned to the nest/nest box; parent barn owls will not usually feed their chicks out of the nest and so the grounded young owl would die. Gloves are advised, as young owls of all species have very

sharp claws and beaks. Field voles are the preferred food source for both barn owls and kestrels; so far it is a good vole year. Voles eat the new green shoots of grass so although fine weather is good for hunting owls and kestrels some rain to promote the growth of grass - and farm crops - is vital.

We will be ringing the kestrel chicks very soon and the barn owl chicks in a few weeks.

Update: five healthy and well fed young kestrel chicks, hatched from the clutch of six eggs, were ringed on the farm on Sunday 7th June.

Alison Rymell
Deverill Raptor and Owl Group





Photo credit Hugo Brook

Moths

There were 31 macro species identified on the farm and a total of 250 moths.

The stars of the show were the three Pale Brocades.

Birds

Report from Tim Ridgers- Steer

Confirmed breeding species from this session was as follows: Whitethroat, Blackcap, Chiffchaff, Willow Warbler, Linnet, Wren, Great Tit, Blue Tit, Coal Tit, Chaffinch, Robin, Blackbird. But perhaps most interesting was 3 retraps from previous years.

Chiffchaff: Ring No LAP995 was ringed as a juvenile at Pewitt gorse last September, having never migrating before, has now returned to its natal site, from their wintering grounds in North Africa and the Med.

We can also confirm that this bird is now a breeding male.

Chiffaff: Ring No KXH 416 was ringed here as a juvenile in July 2018, has returned for the second year. This bird now confirmed as a breeding female.

Blackcap: Ring No ALF5565 was ringed as an adult male last July, has now returned to breed again.

Also observed was good numbers of Small Heath and Common Blue Butterflies.

Below are two photographs of a pair of Linnets that were ringed, showing the clear differences between male and female.



Male Linnet



Female Linnet



Butterflies



The recent hot sunny weather, has encouraged some species to emerge earlier than usual- such as the Large Skipper, which was sighted in the middle of May, is not normally around

till June. On the butterfly bank there are good numbers of Common Blue, along with an abundance of bees, other species that have been seen around the farm are as follows:

Brimstone, Painted lady, Orange Tip, Peacock, Small Tortoiseshell, Red Admiral, Small Heath, Small White, Large Skipper, Common Blue.

Bees

The bees look in excellent shape, occupying the hives as indicated.

The bees are flying strongly, and all provide the possibility of one or more swarms this year.

There is significant scout activity around the Tree Hive and it is expected that it will fill with bees within a week if the weather is warm.

Our flower crops will provide excellent pollination grounds for the bees and we will not be surprised to find bee hives in other parts of the farm.



Box Hive 1



Box Hive 2

The beehives of Lower Pertwood Farm

David Scales

It was on a bank holiday on Friday 8th May when I was privileged to spend a few hours with Jonathan Powell – beekeeper par excellence. The hours were filled with inspecting 6 beehives and learning so much about bee's and what a worthwhile day it was.

It had been a very harsh winter and we were hoping that we would find something, even if it was only in one box.

We were both very happy to see that the bees looked in excellent shape, occupying Box Hive 1 and Box Hive 2 as well as the Tree log hive. It was around the Tree hive that really caught attention as there was significant scout activity and Jonathan expected that the hive would fill with bees in the not so distant future.

All bees were flying strongly and the exciting news is that there is a strong possibility of one or more swarms arriving during the year. It appears as if the tree hive will be the one to receive the first swarm.

Bees

We are aware that there are some natural tree hollows close to the tree hives and perhaps we may have bees investigate and make another home.

During the visit on the day, Jonathan suggested we consider adding more hives around the farm, and thus we completed erecting another three on Tuesday 2nd June.

The goal of our bee project is to allow the bees to reach a nature density, and characteristics local to the farm ... “Apis mellifera Pertwood”

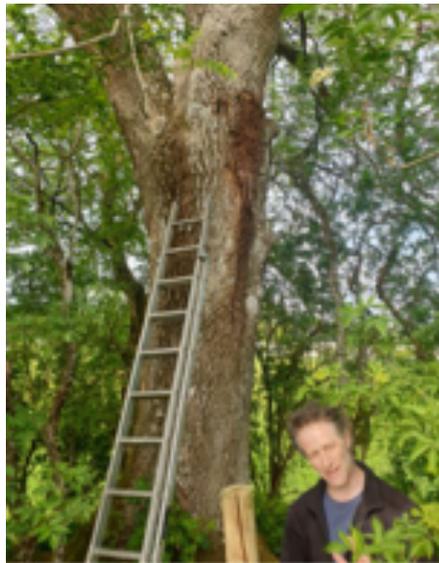
Because of the extensive use of flowers at Pertwood, it is thought that the density of bees the farm could support will be unusually high.

Lastly Jonathan saw none of the problems that bees in boxes on the ground have. Given the right conditions and care, nature (unsurprisingly) is able to look after herself.

And here are the new tree hives ready for the first occupants. More news on the latest three in the next newsletter.



Tree Log Hive



Tree Hive
(above right of top of ladder)



Eco Bee Hive



Our first visit showed that the Eco Been Hive was empty. To our delight it has now been occupied. See the beautiful combs under the hive.

The ground log hive below unfortunately remains empty.



Ground Log Hive. Unfortunately empty however take note of the white combs.





New Beehive 1



New Beehive 2



New Beehive 3

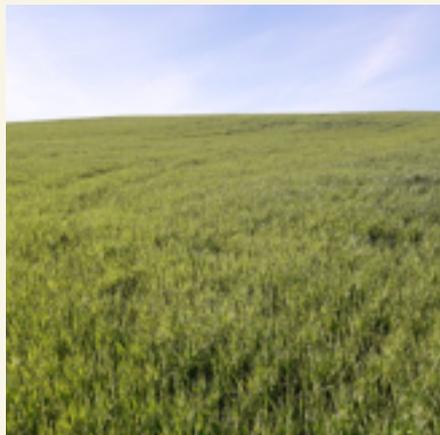


Arable update

Photo credit: Gerwyn Hughes



Winter rye in The Leas



Winter oats in Near Cowdown



Spring oats in Plough Down South

The main yard

There has been lots of construction work taking place to improve the main yard. A new large oak garage has been built to house our military Land Rovers. The main yard has been leveled and a terraced wall has been built with steps leading up to the main house and office.



Soil health



Why your health is dependent on soil health.

Our microbiome, the ecosystem of our bodies is intrinsically linked to the ecosystem of the soil. The health of both are reliant upon and strive towards biodiversity. Yet industrial farming coupled with poor diet has led to a dramatic decline in biodiversity and health, both in the gut and soil. Only recently are scientific studies unearthing the magnitude of how interconnected we are to our natural world. At a time when both the health of our bodies and soil are under threat, we must look at how we can promote biodiversity in the soil and gut as it is a vital ingredient to good health.

There are more species of organisms underground than there are above ground¹. When healthy, the soil is a living organism filled with

billions of microorganisms and a sprawling mycorrhizae network all working in harmony to decompose matter and share nutrients with plants in exchange for carbon which is in turn sequestered into the soil. When in balance, the soils are great underground metropolises, with billions of tiny microorganisms each working in harmony with each other and playing a vital role in supporting biodiversity. However, intensive farming has led many soils to become dry and barren of nutrients and microorganisms. Chemical inputs, in particular glyphosate, coupled with over-farming has reduced biodiversity and left behind lifeless deserts of soil systems which were once a biodiverse hive of health.

How does this affect you and your health?



Jess Abis

Co-founder of
100 Percent Natural Foods

A recent study has shown that there are approximately 100 trillion active microorganisms in the human gut², bacteria being the most prevalent but also a variety of fungi, viruses, and protozoa. The diversity of the microbiome of the gut is dependent on several factors including what we eat, air quality and water quality.

According to Dr Zach Bush MD, an expert in internal medicine and endocrinology, our microbiome is directly affected by environment around us through it's interaction with the gut.

He states that
'the health of our soil microbiome is the single most potent factor determining how healthy, or unhealthy we are'³.



¹ Sedsel Brøndum Lange, Underground animal world crucial for life above ground, Science Nordic, 15/9/15

² Tasting the Future, Unearthing the Science Behind Soil Health and Gut Health, 7/11/19 <<https://tastingthefuture.com/tag/soil/>>

³ Tasting the Future, Unearthing the Science Behind Soil Health and Gut Health, 7/11/19 <<https://tastingthefuture.com/tag/soil/>>

⁴ Claire Young, Diet and the Gut Microbiota, Food and Mood Centre, 07/16

Let's imagine we live on an organic farm such as Pertwood, the rolling Salisbury plains a home for biodiverse life both above and below ground. The fields here are only ploughed if necessary, no chemical inputs used, allowing minimal disturbance to the mycorrhizae network and microorganisms which reside there. The soil here is nutrient rich and high in soil organic matter (SOM), which in turn helps to grow nutrient dense crops. When we eat these crops, our gut is coming into direct contact with the soil in which they have grown. Our microbiome changes within hours of eating⁴, so quite literally 'you are what you eat'.

Now imagine you live on a industrialised farm, using an array of chemical inputs, regularly tilling the land and growing genetically modified monocrops. The usage of chemicals here, in particular glyphosate, has killed the intended weeds, but they have also nonintentionally killed much of the biodiverse bacteria which reside there. The lack of life and biodiversity in these soils means less organic matter is being decomposed, thus less SOM, less nutrients to exchange with the plants for carbon and therefore less carbon being sequestered. When our gut comes into contact with the food grown on a farm such as this, the microbiome will be starved of bacteria and nutrients. We now know that biodiversity is intrinsic to good health and know how quickly our microbiome is affected by the environment (ie. food and soil) which it is in contact with. So eating

a carrot, whether from an organic and regenerative farm such as Pertwood, or an industrialised farm will almost instantaneously affect the microbiome of your gut.

With the mammoth growth of industrialised farming using vast quantities of chemical inputs, it's no wonder that the life of our soils are under threat. The UN has warned that in the UK we have just 100 harvests left⁵. Yet nature, with it's vast complexity and intelligence has a remarkable power for regeneration, both in our guts and in the soil. So just as quickly as the soil and our guts have been depleted of nutrients and biodiversity, so can they repair and regenerate these internal and underground ecosystems.

We are only just beginning to scratch the surface of understanding how interconnected our bodies are to the world around us. With the

knowledge of how dependent our health is on the health of the soil, it is more important than ever that we make wise choices when buying and eating food. Not only are you supporting biodiversity and soil health when buying organic, you are also supporting biodiversity and health in your own body.

So next time you're shopping and pick up an organic carrot, take heart in the knowledge that the non-chemical, non-intensive farming practices which have helped to grow this healthy carrot, have supported a beautifully complex system of micro-organisms in the soil, which in turn will support the microbiome and health of your gut.



⁵ Fiona Harvey, UK farmers to be given first ever targets on soil health, Guardian, 13/3/18