

# Ewelme Watercress Beds and Local Nature Reserve

Update on results of wildlife surveys for 2020



## Introduction

Regular, carefully designed and undertaken surveys are vital to understanding long term trends and consequences of site management strategies. Ideally it would be good to survey a wide range of flora and fauna but with only volunteer staff being available there is a limit to what can be achieved. It is also important that surveys are carried out over a long period as short term effects of temperature, floods, droughts etc can significantly influence short term results.

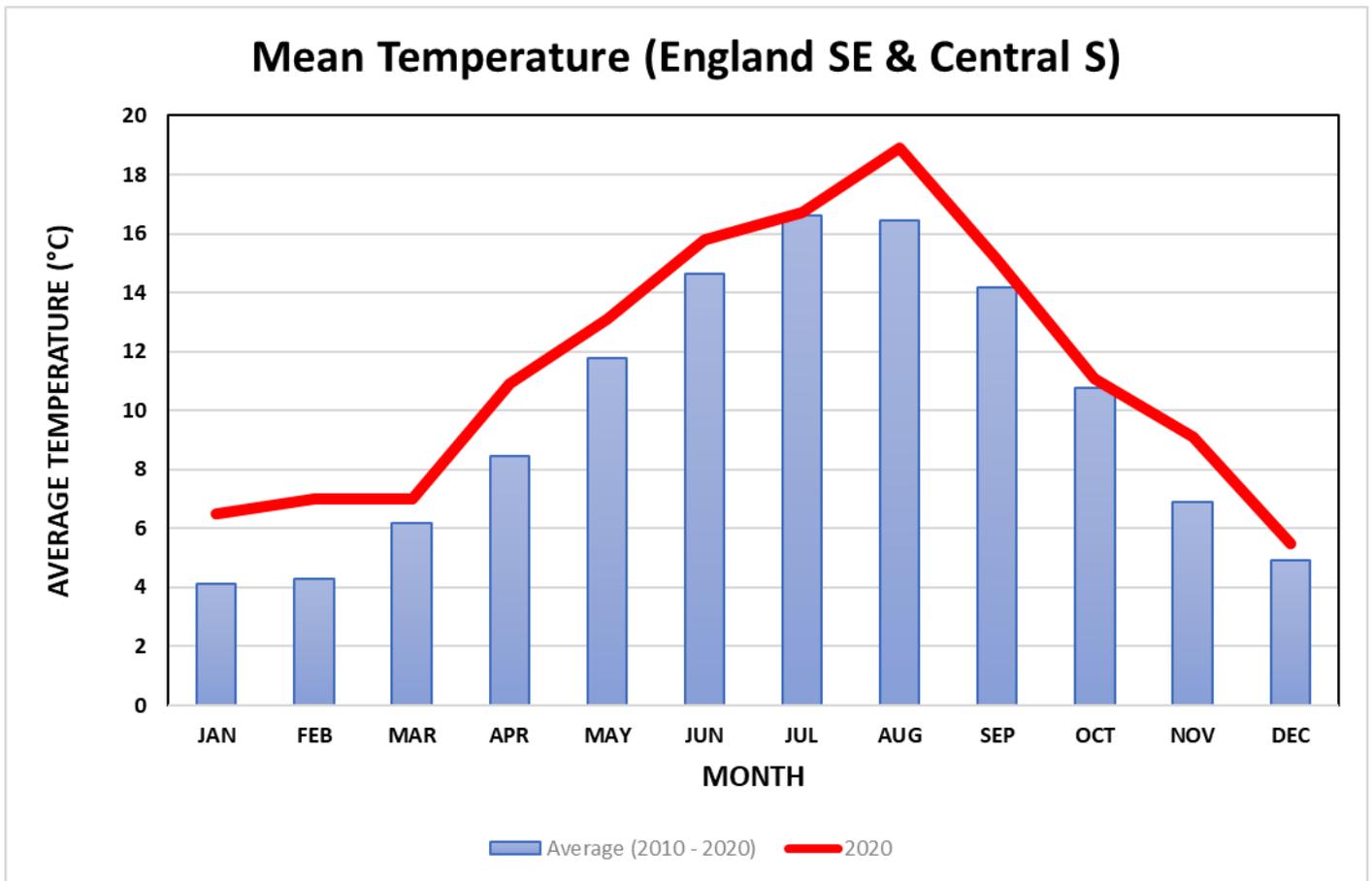
To say 2020 was a strange year would be an understatement. The various restrictions in place due to Covid19 inevitably affected work and surveys on the reserve for example with fewer survey visits.

# Weather



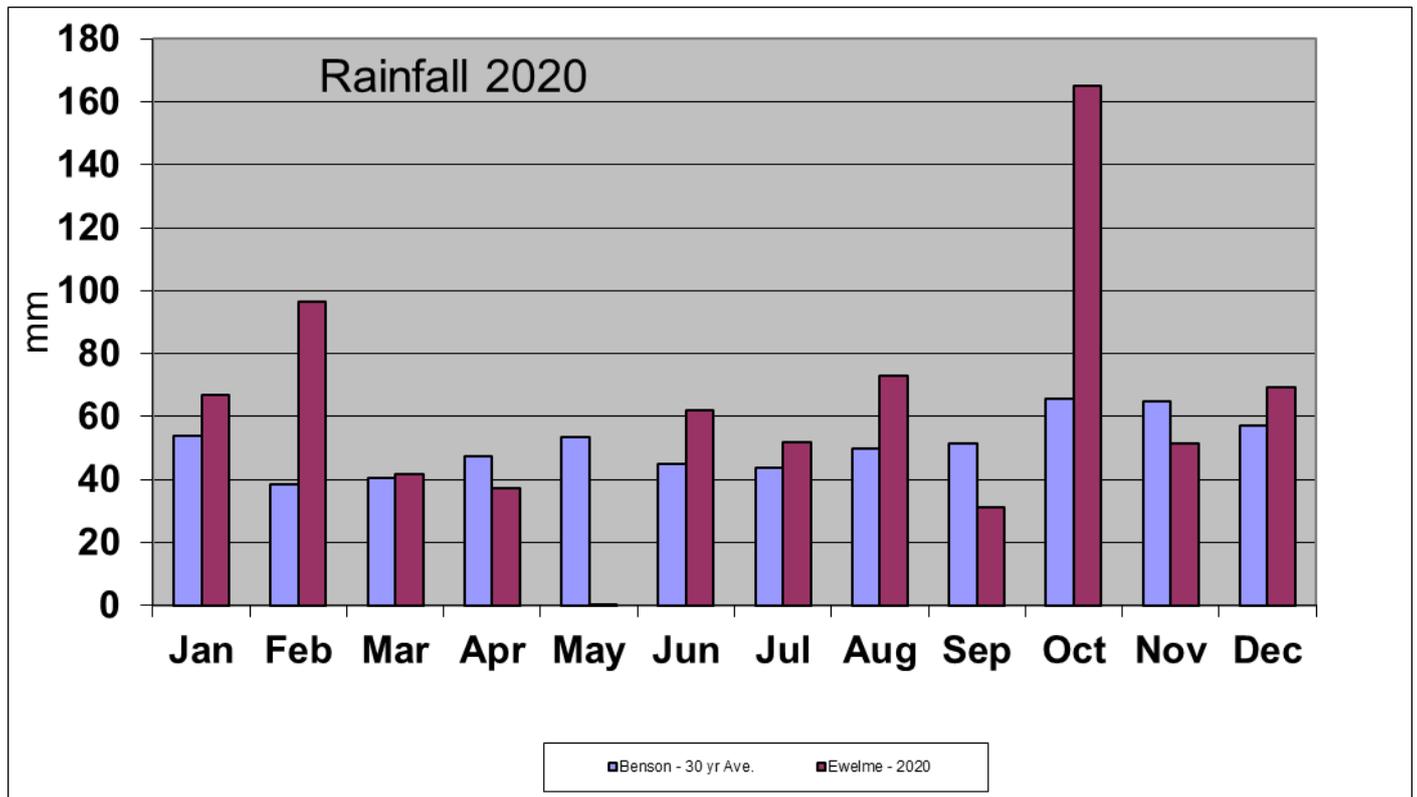
## Temperatures – courtesy of the meteorological office

These temperatures relate to south-east and central south of the country as I was unable to source suitable local records. It is clear that, compared to the long-term average, 2020 was very warm with every month exhibiting above average temperatures.



## Rainfall – measured in Benson garden

The rainfall in 2020 was 22% above the thirty year average. The most noteworthy records were for February, October and May. The rainfall in May being barely measurable and the other two being more than twice the average. The above average rainfall in the last three months of the year should ensure that the flow down the brook will be maintained throughout 2021.



In mid-December the winterbourne source in the manor grounds began to flow for the first time in ages.



## Volunteering



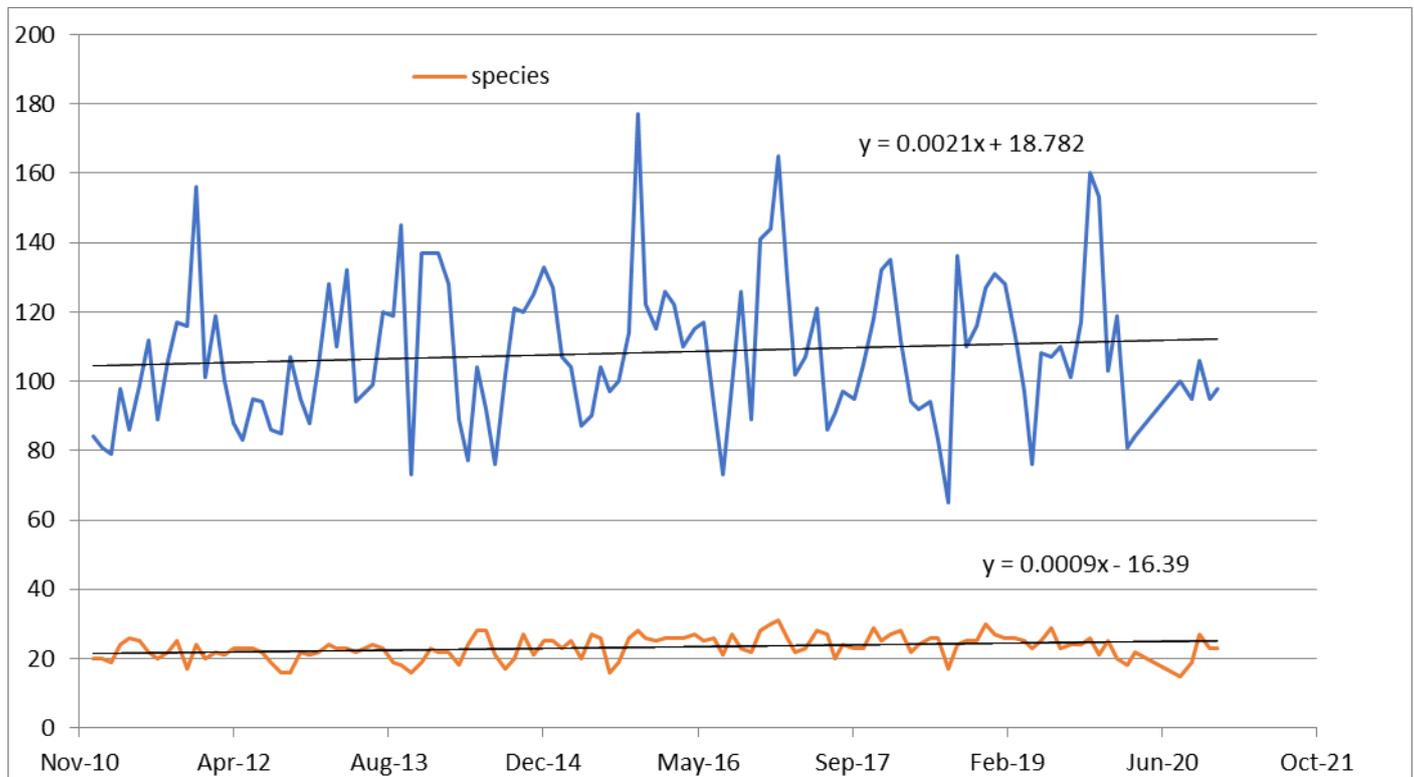
Volunteering through most of 2020 was severely curtailed, due to the pandemic, and comprehensive records were not kept. It should, nevertheless, be noted the great help provided by some of the neighbours and the Wallingford Green Gym who welcomed the opportunity to undertake their permitted exercise by working, within the various restrictions, on the watercress beds.

## Birds



Bird species, on the beds, have been recorded since October 2002 but only casual observations during walks through the site were recorded during the early years. These are not presented. The following results were obtained during monthly bird counts which commenced in 2010. The whole site was walked and every bird seen or heard noted.

The straight line shows the trend based on least squares linear regression.



Over the period from December 2010 to date numbers, both of individual birds and of numbers of species, have shown a small rise.

During 2020 57 species were recorded. This was very much lower than the normal number of high 60's or low 70's but probably due to the small number of visits in 2020. Over the three previous years an average of 232 visits were made when at least 1 bird was recorded but, in 2020 only 136 such visits were made. Perhaps unsurprisingly no new species for the site were recorded during 2020. Water rails continue to spend their winters with us though were not seen in the latter months of 2020. The little egret/s continue to frequent the beds during the winter months and, on one occasion four were seen together.



Four Little Egrets



Plume of a Little Egret

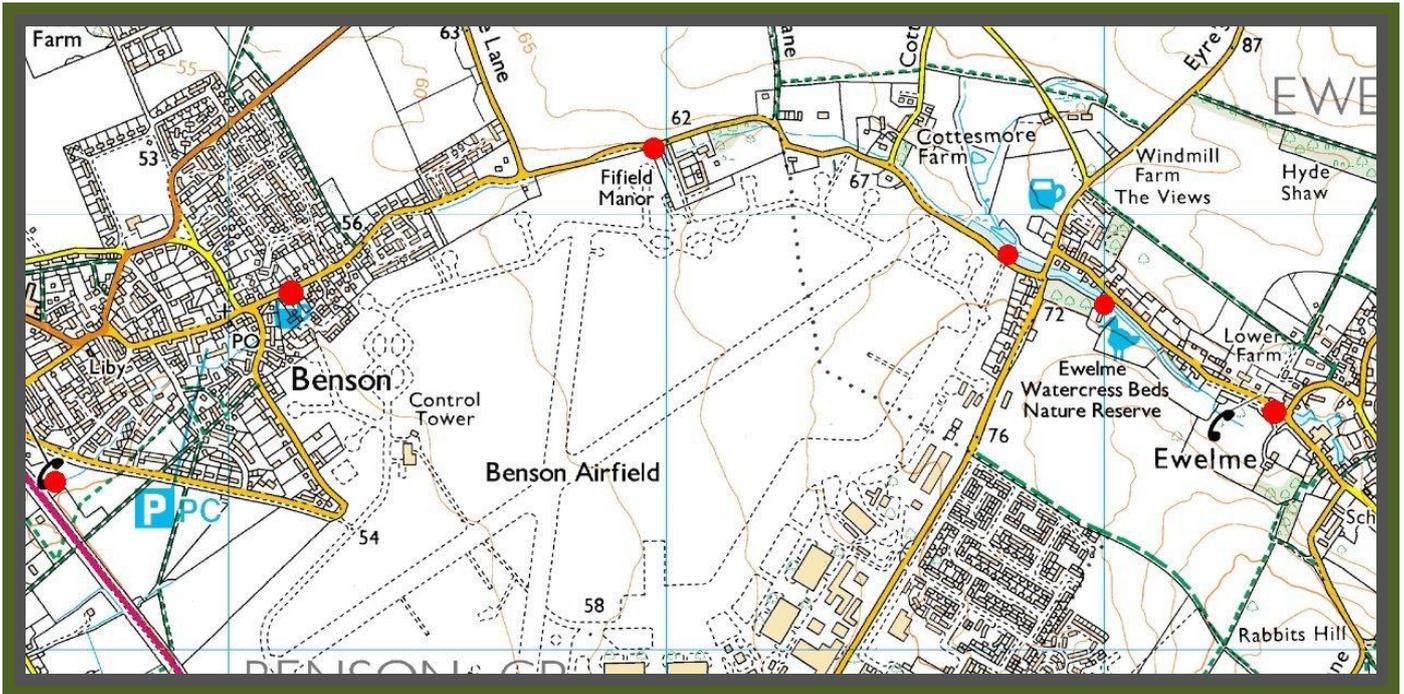
The following table shows the percentage of visits each of the top 20 birds (long term) were seen both in 2020 and “all time” The numbers in red illustrate changes of more than 5%. Eight species showed a lower percentage in 2020 and two a higher. The difference in surveying frequency, as mentioned earlier, could have affected numbers.

SPECIES		
	2019	ALL
Blackbird	96.0	98.6
Mallard	100.0	98.5
Woodpigeon	96.0	98.3
Moorhen	97.3	97.2
Rook	92.0	96.4
Robin	92.0	95.0
Great Tit	97.3	92.6
Blue Tit	96.0	92.2
Red Kite	97.3	91.5
Jackdaw	78.7	87.2
Dunnock	70.7	85.9
Wren	69.3	84.7
Chaffinch	56.0	80.9
House Sparrow	33.3	77.3
Carrion Crow	92.0	76.2
Grey Wagtail	74.7	72.5
Starling	49.3	68.0
Goldfinch	33.3	59.8
Feral Pigeon	44.0	54.9
Magpie	50.7	54.3

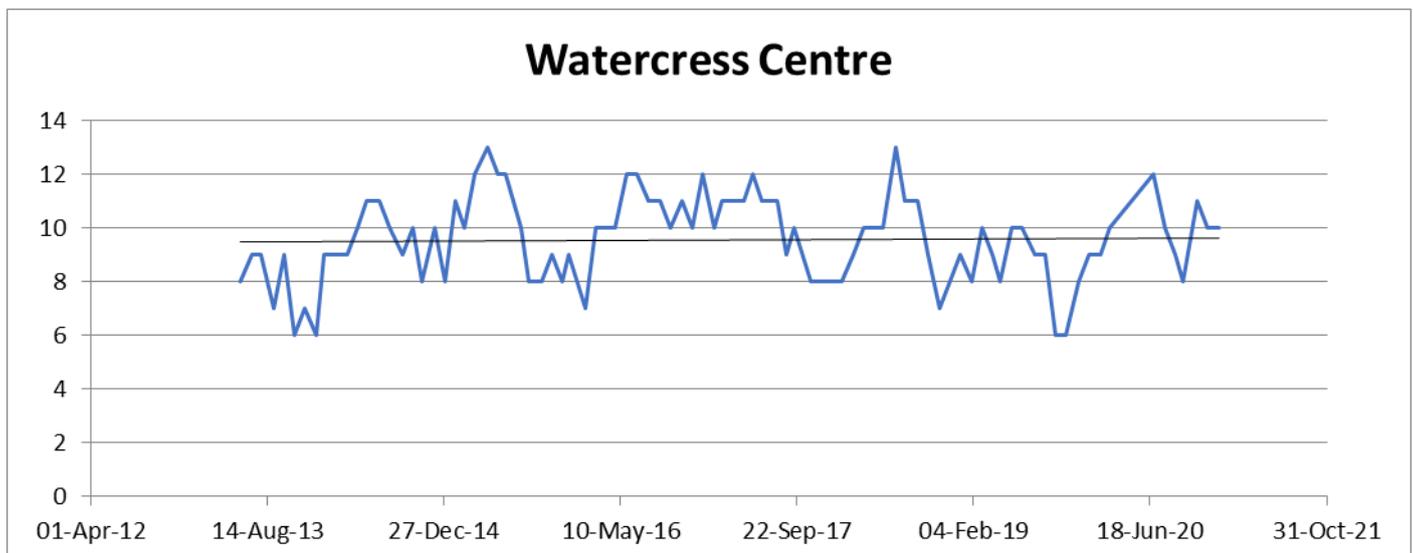
## Riverflies



## Monitoring Sites



Two of the four members of the team (remaining two have moved out of the area), specially trained to carry out riverfly monitoring, have continued to survey the invertebrates, monthly, in the stream over the past year with a three month break due to restrictions. One small change to the map above is that the site at Fiffield Manor has been dropped for various reasons. The larvae of river flies are vital to the health of the brook and they form the main food source, both in their larval and adult forms, of many other creatures. They are also a good indicator of the purity of the water as they are the first creatures to be affected if contaminants enter the stream. The survey method involves timed “kick sampling” followed by the counting of the various species caught. Scores are allocated depending upon the numbers found.

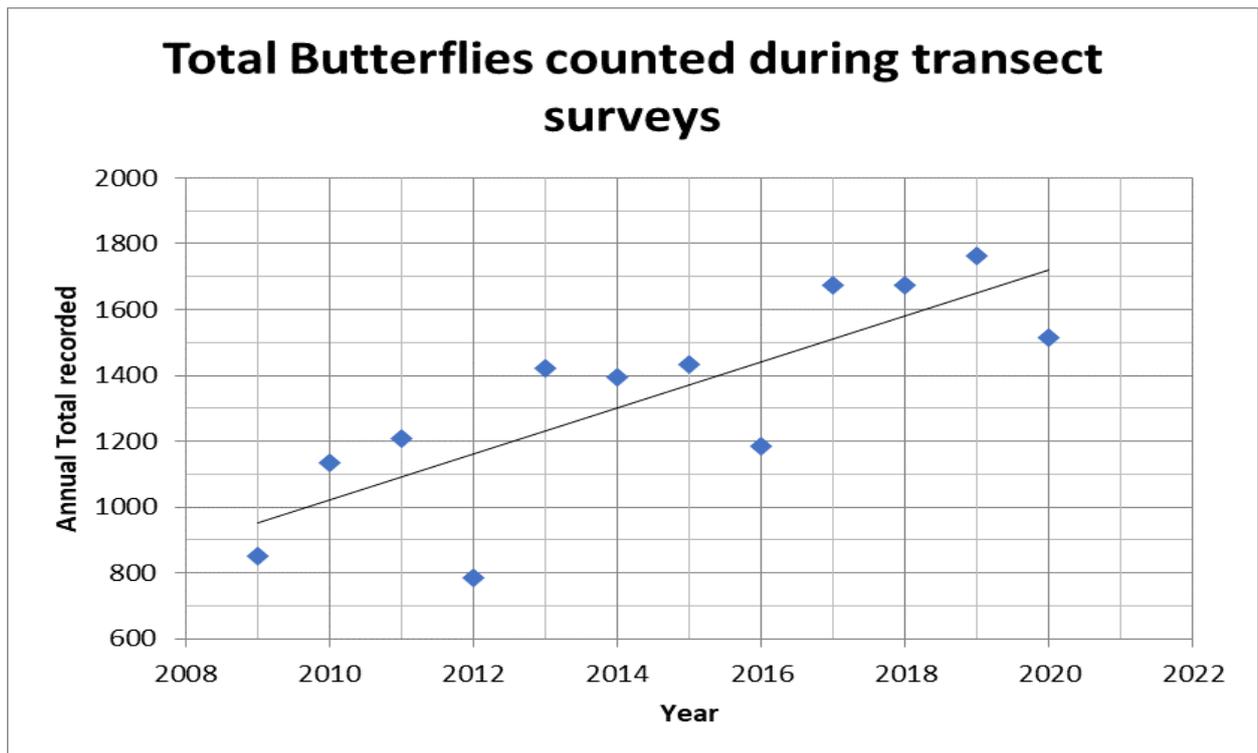


The results for the site located outside the Ewelme visitor centre are shown above. Surveys have been undertaken over the last seven years. The data shows quite large variation in the population of invertebrates but there is no evidence of any serious pollution incidents or long term change.

# Butterflies



Butterflies have been recorded since 2009 using The UK Butterfly Monitoring Scheme (UKBMS). This involves walking a route round the site under carefully proscribed temperature and sunshine conditions recording all butterflies within 2.5 metres of your person. This is carried out weekly during the summer months.



In total 22 species were recorded during 2020, one down on 2019. The above graph shows the total number of butterflies counted during the surveys and illustrates an upward trend over the 11 years of surveying. Numbers in 2020 were a little down on the previous years which is in line with national counts. Just one species “broke site records” with best ever count, by some margin, of Small Skipper. A few of the early weeks of the season were missed because of the COVID-19 restrictions and this could have had an effect especially on numbers of the early flying Orange Tip which seemed to be around, elsewhere, in larger than average numbers.

## Mammals



Unlike the survey results presented above the following list is simply based on casual observations and can only be considered evidence that the species has been seen on the site but not necessarily in 2020. Disappointingly, again, there was no evidence of Water Voles.

<b>Wood mouse</b>	<b>House mouse</b>	<b>Bank vole</b>
<b>Field vole</b>	<b>Water vole</b>	<b>Harvest mouse</b>
<b>Brown/Common rat</b>	<b>Grey squirrel</b>	<b>Common shrew</b>
<b>Water shrew</b>	<b>Mole, European</b>	<b>Hedgehog, Eurasian</b>
<b>Rabbit</b>	<b>Fox</b>	<b>Badger</b>
<b>Polecat</b>	<b>Stoat</b>	<b>Weasel</b>
<b>Daubenton's bat</b>	<b>Pipistrelle, Common</b>	<b>Pipistrelle, Soprano</b>
<b>Roe deer</b>	<b>Muntjak Deer</b>	<b>Pygmy Shrew</b>

## Dragonflies

10 species were recorded in 2020 which is about average for the site. The pond on the lower site is the favoured area and few were seen elsewhere as the stream flow was higher and most dragonflies prefer slow or still water.



## Pond

The pond continues to hold large numbers of Frogs, Toads and Common Newts as well as good numbers of other invertebrates and insects.



## Reptiles

For the first time in recent years no Grass Snakes or Slow Worms were seen but it was good to see a single Common Lizard, the first recent record. This is an animal I have long thought must be present on the reserve but has proved elusive.

## Orchids



### In 2019

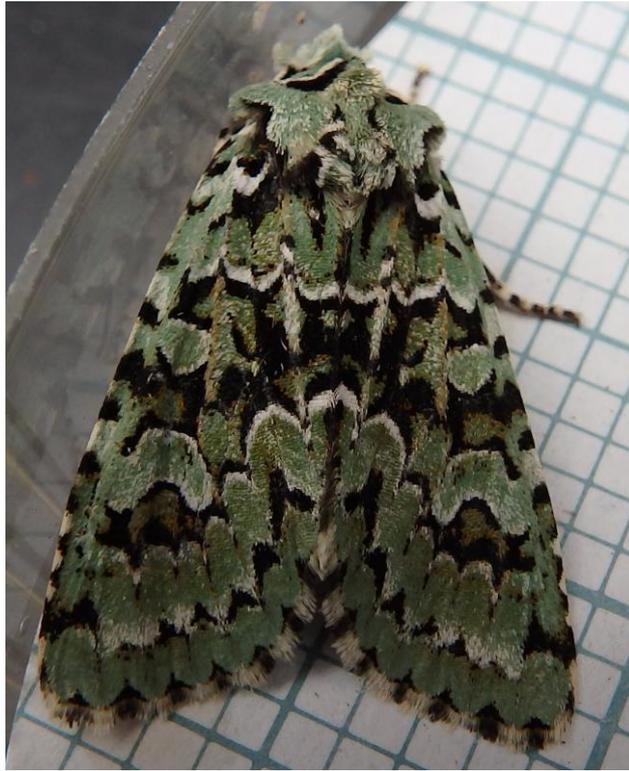
Common Spotted	17
Southern marsh	36
Green winged	45
Pyramidal	11
Bee	3

The wildflower meadow continues to provide a home for good numbers of Orchids. The total, in 2020, was 112 of 5 species, slightly up on the previous year. No new flowers were identified leaving the total on 177 species.

A full list of species recorded on the Ewelme Watercress Beds Local Nature Reserve can be seen at

<http://www.ewelmewatercressbeds.org/>

## Moths



Mainly due to Covid19 restrictions no moth trapping was undertaken on the site in 2020. The total number of species for the site remains on 335.

As with the flowering plants above a full list of moth species recorded on the Ewelme Watercress Beds Local Nature Reserve can be seen at

<http://www.ewelmewatercressbeds.org/>