

# **Chippenham Fen NNR**

## **Reserve Report**

**April 2016 - March 2017**

**Michael Taylor  
Reserve Manager**



# Reserve Management

## Staff

Management work was carried out by Reserve Manager Mike Taylor and Senior Reserve Manager Chris Hainsworth, together with HLF funded trainee Ruth Angrave, assisted at times by a number of volunteers.

## Grazing

### Buffalo

The six water buffalo grazed parts of the reserve as follows (grazing units named as on Map 2 Grazing areas) :

Pigeon	20 July – 31 August; 28 September – 10 November (85 days)
Baxter west	1 April – 13 April; 10 November – 2 December (c9 only); 2 December-31 March (154 days).
East meadows	26 May – 20 July; 31 August –28 September (83 days).
North meadows east	13 April – 26 May (43 days).
North meadows west	Not grazed by buffalo this year

In 2016-17 the winter remained relatively mild with only a couple of short cold snaps, but despite this it was again necessary to supplementary feed the animals with barley straw from 9 January until early April - as last year the animals were fed at Bullock Hill. Two bales per day were given, and in all 194 bales were given to the animals, compared with 100 in 2015-16, 180 in 2014-15, 150 in 2013-14, 274 in 2012-13, 206 in 2011-12 and 212 bales during the harsh winter of 2009-10. The straw was supplemented with one 15kg bag of carrots per day (a total of 86 bags).

Lice infestation was as usual evident during the winter but the animals were not treated with Trodax this year.

No dung samples were taken this year.

The electric fence around the Baxter west grazing compartment was strimmed once over several days in August and September; the fence around Pigeon grazing compartment was strimmed once, between 11-15 July. Fences were checked several times per week when buffalo were grazing, and any repairs

made as necessary. Several fallen or dangerous leaning trees were removed along the fence-lines during the year. Several leaning willows were cleared from the Baxter west fence on 8 November. Storm Doris brought several trees down across the Baxter west fence on 23 February – these were cleared on 24 February.

Ruth Angrave rotovated the worst buffalo-poached areas in Baxter west, notably the feeding area at Bullock Hill, on 9 May.

Rotted fence posts were replaced as necessary through the year, with several replaced in East meadows and along the footpath in compartment 1 in particular.

The weekend buffalo checking rota, involving NE staff and volunteers, continued throughout the year. For most of the year checking was done only once per weekend, but each day between 10 January-April when we were feeding the animals.

## **Cattle**

Grazier Roger Beecroft brought 5 Redpoll cows and 5 calves on to compartment 1 on 28 June. By the middle of July there were 8 cows and 8 calves present and on 2 August a bull was added. The bull was taken off on 9 October, and the 8 calves taken away on 19 October. The remaining 8 cows stayed on site until 18 December.

As usual, an electric fence was maintained along the eastern boundary of compartment 1, to separate Beecrofts cattle from any cattle that may be grazing in the neighbouring SSSI meadows. Putting the fence up, taking it down and maintaining it (strimming, changing battery) took a total of about 4 days during the summer. The fence was finally taken down on 19 December.

A new grazier, Will Taylor from Isleham, grazed about 28 Angus x Sussex cattle on the set-aside buffer land south of the fen from May until October, except between 19 July and 1 September when we walked them up the footpath and grazed compartment 2. At first, the cattle were temporarily fenced out of the best orchid areas at the east end of the compartment to allow the fragrant orchids to flower, but once these had gone over the temporary fences were removed. These cows did an efficient job of grazing the compartment, completely stripping all trace of flowering plants, as well as tackling the rush and grasses. Will powered his energiser from the workbase electricity supply, and filled up water troughs from our outside tap (hence the massive increase in water consumption this year – see later)

Will Taylor was keen to graze the whole of the north meadows in 2017, and offered NE more for a grazing licence. In the current economic climate, and with pressure for NNRs to generate income, this offer was too good to refuse, and so,

reluctantly, our association with Roger Beecroft has ended, at least for the time being.

## **Rides/ Ride-Cutting**

All main rides were cut regularly from 9 May, using the Gator and flail mower. The Wessex flail mower developed engine problems on 11 July, which needed major repairs by Stephen Eyles, meaning it was out of action until late September. In the meantime, ride cutting was reduced, as we had to use the BCS mower or, on one occasion when ground conditions allowed, the Kubota and flail. On 5 October the roller bearings went on the Wessex, so the machine was out of action again for a short period. In total 5 man-days were spent ride cutting.

Any windblown trees/branches were promptly cleared from rides. In particular a large pine bough was cleared from the top of the footpath on 15 September, and a number of trees were blown across the footpath by Storm Doris on 23 February. These were cleared over 2 days in February and March.

The 'forgotten ride' in 40 acre wood was cut with BCS mower and chainsaw on 21 February – cut material was cleared on a half day volunteer work party on 26 February.

## **Topping/Cut and gather**

11.5 man-days were spent cutting selected areas in compartments 1, 2, 8, 9, 11 and 13 using the tractor and Ryetec cut and collect machine between 26 July and 5 October. MT replaced worn belts on the Ryetec on 19 August, and on 26 September the roller bearings on one side went – this was fixed by Stephen Eyles on 30 September.

Several areas were cut by BCS and brushcutter over 6 man-days in mid-August and early September, including all the 'traditional' cut areas. These were raked off during two Cambridge Conservation Volunteer tasks, on 28 August and 18 September.

An area was cut in compt 8 using the BCS, side arm mower and strimmer 26/27 October. This was raked and burnt by 8 NE staff and volunteers for an NE Green Day on 2 November.

A block in compartment 8, near dipwells 7 and 12, was cut with the BCS on 13 December. This was raked off on an NE CST team building day with team leader Mike Hyde-Parker on 15 December.

The Cambridge milk parsley area near dipwell 9 was cut with BCS on 3 January, and raked by NNR volunteers on 4 January.

An area between dipwells 9 and 10, in compartment 11, was cut with BCS on 18 January. This was raked up on a weekend volunteers day on 22 January.

The Ryetec was loaned to the NE Collyweston base between 6 September and 20 September and again between 17 October and 14 November, and to the NE Suffolk coast reserves between 23-30 January.

## **Sedge Cutting**

Marcus Setchell carried out the sedge cutting this year, in compartment 4 between 30 August and 12 October. In all about 1800 bundles were cut and carted off, and most of the waste material tidied up.

## **Woodland/Scrub**

Phil Brown carried out his woodland breeding bird survey in compartments 3 and 12. This is the final year of baseline data collection.

The ditch between compartment 8 and Baxter east (ungrazed section) was almost completely cleared of trees in January and early February. A large clump of willow on the edge of Baxter east was cleared in early February.

Small hawthorn scrub was removed from a grassy bank on the east edge of compartment 11 in February.

All cutting management work was GPS mapped in February.

## **Water**

Tracks to our dipwells, and the EA dipwells on the north meadows and in compartment 8 were periodically strimmed/mown for ease of access.

The Environment Agency fitted a new rain gauge funnel on 5 April.

Two invertebrate specialists carried out CSM monitoring in selected ponds and ditches on the fen on 19 May.

## **Access**

Numerous fallen trees were cleared from rides around the reserve during the year. The western arm of the top footpath was strimmed once during the summer.

The bench at the main footpath/Baxter crossroads was repaired and replaced on 18 April.

A new bridge was erected over a ditch on the compartment 8/11 buffalo fence line in early September.

## **Deer/Pest control**

Jim Riley and other licensed stalkers shot the following on the reserve between April 2016 and March 2017:

16 Muntjac bucks, 6 Muntjac does, 4 Roe bucks, 2 Roe does, 6 dog foxes and one vixen.

## **NNR Workbase**

The office, lobby and w.c/shower were cleaned every two weeks by Mark Day on contract. The workshop and tractor area were swept/tidied by NE staff when time allowed.

The fire alarm system was repaired/serviced by M-Fire on 8 July and 16 February. NE staff tested the fire alarms on a monthly basis. Fire extinguishers were serviced by M-Fire on 8 March.

The septic tank was not emptied this financial year. Willow Pumps serviced the septic tank pump in July.

Portable electrical appliances were not tested this year.

The two tractors, Gator, Wessex flail mower, Votex flail, rotovator, Ryetec and BCS were due to be serviced by Stephen Eyles in February, but illness meant this was postponed until later in 2017.

Two bird feeders in front of the workbase, and later two more near the buffalo pen, were kept filled throughout the year, two with peanuts and two with sunflower hearts.

Browns of Burwell delivered 1200 litres of diesel to our tank on 2 June, and a further 1200 litres on 27 March.

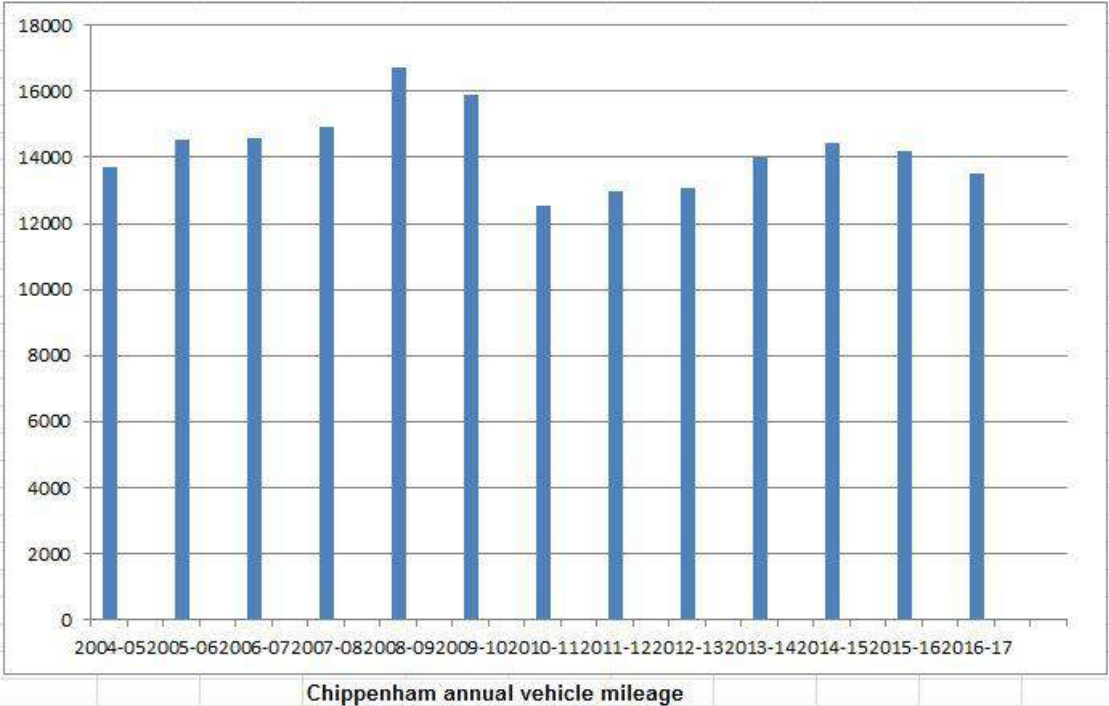
Contractor Paul Crane carried out major re-surfacing of the area in front of the shed, and parts of the access track on 5-7 December.

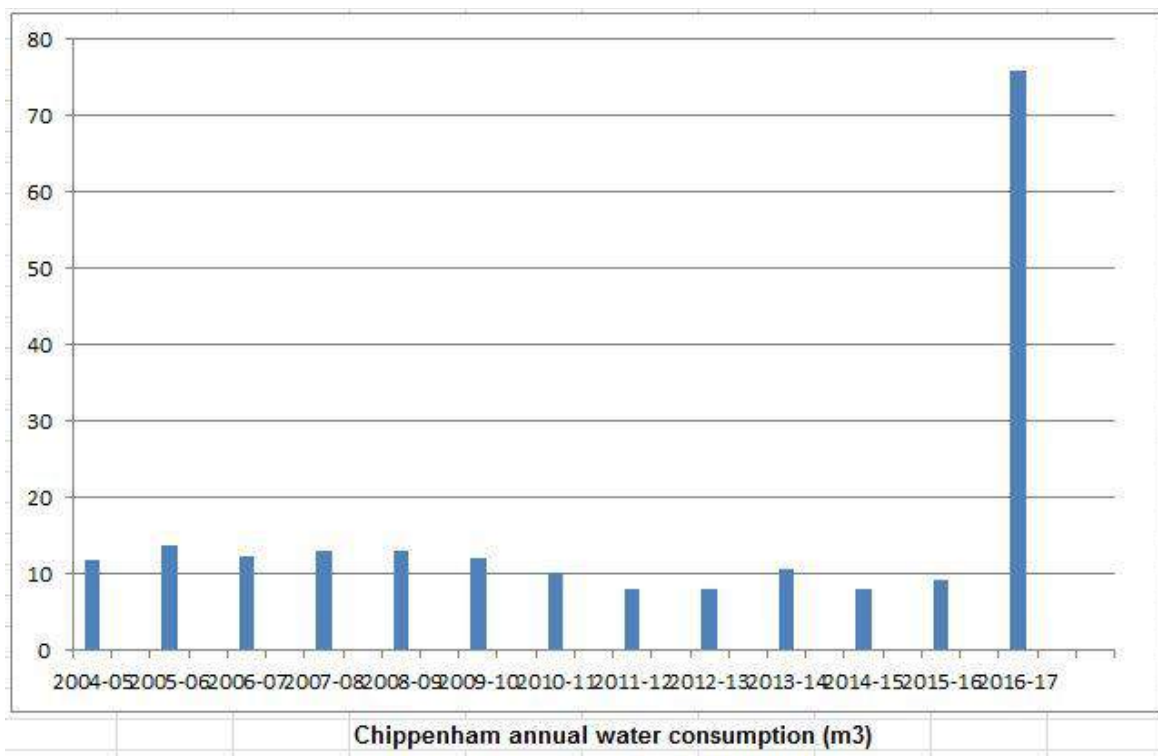
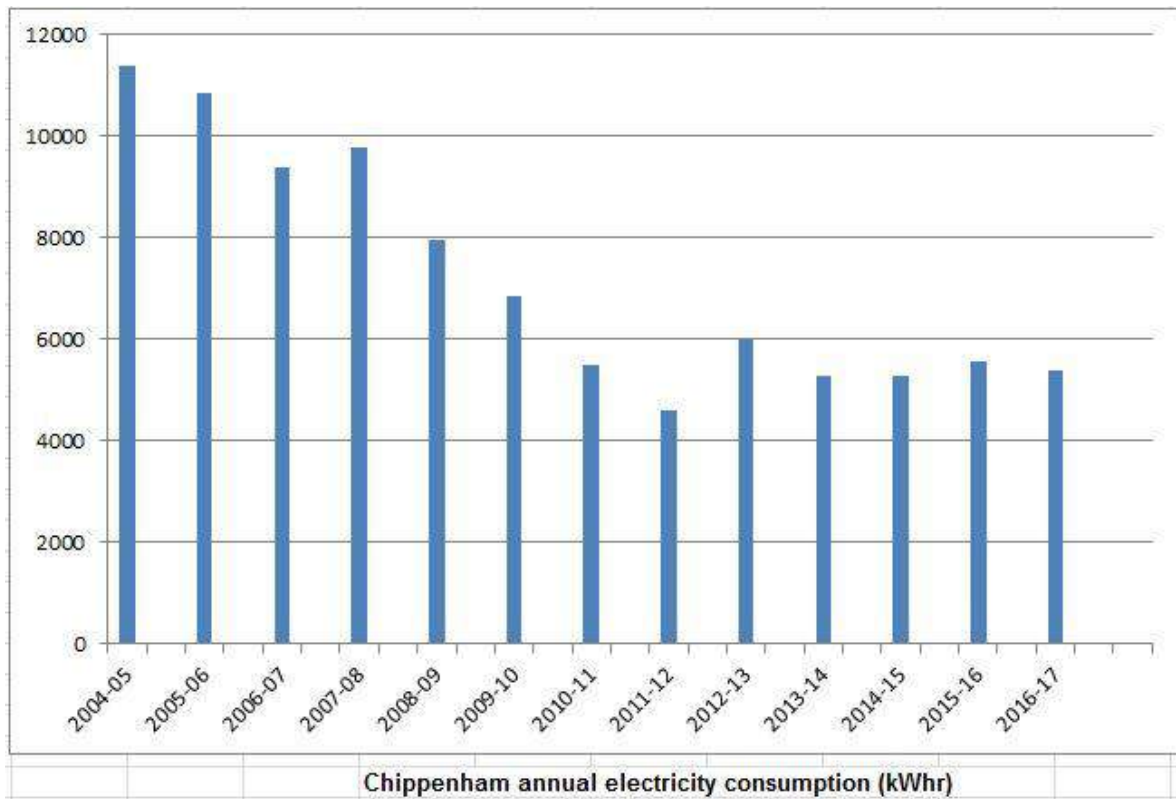
A surveyor from Mott MacDonald surveyed the building on 2 March as part of a DEFRA estates review. Also as part of this review, the water system was checked on 7 March, principally for Legionella risk.

Lynda Foster investigated the possibility of installing solar panels on the roof of the base – solar panel fitters visited on 2 and 6 March, and on 8 March the building was surveyed for an EPC certificate.

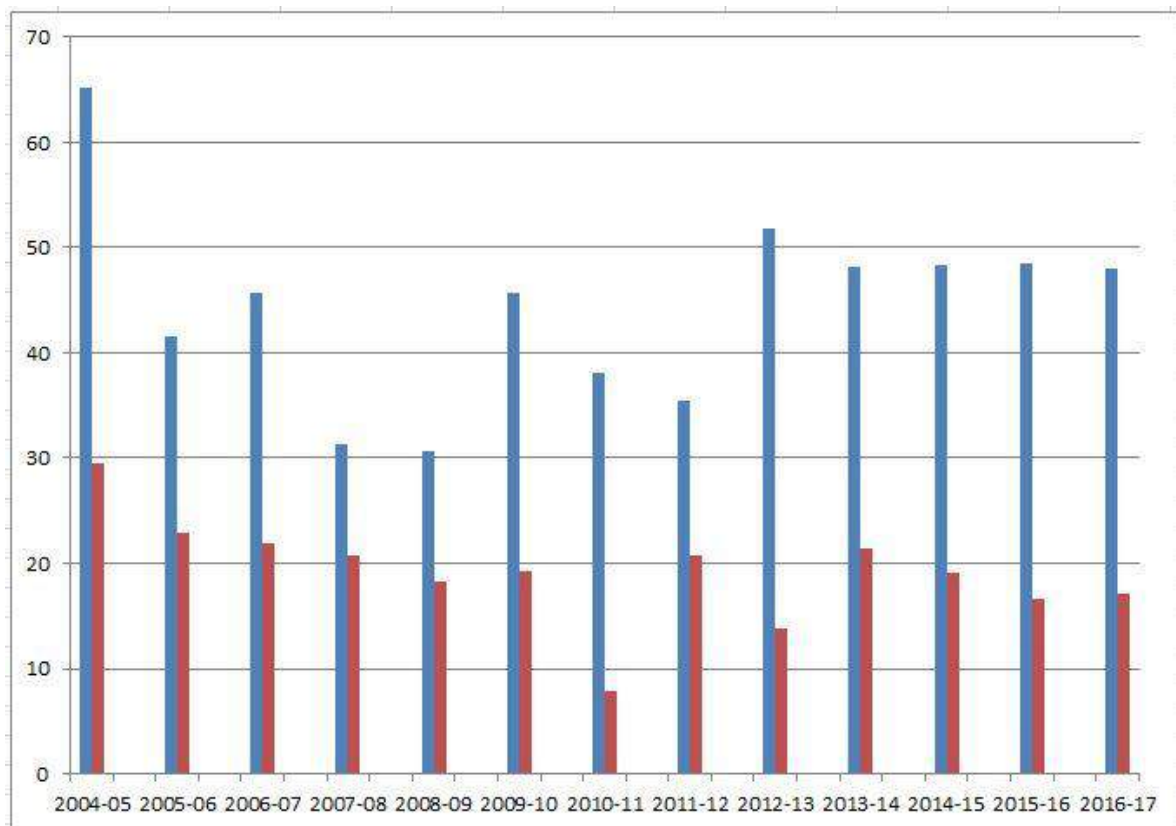
On 28 March Cambridge Electrical carried out an installation check in the building.

For a number of years we have recorded environmental data for the work base each month, together with vehicle mileage data. Charts showing the annual totals of mileage, electricity consumption, water consumption, cess, rubbish and recycling produced are below:

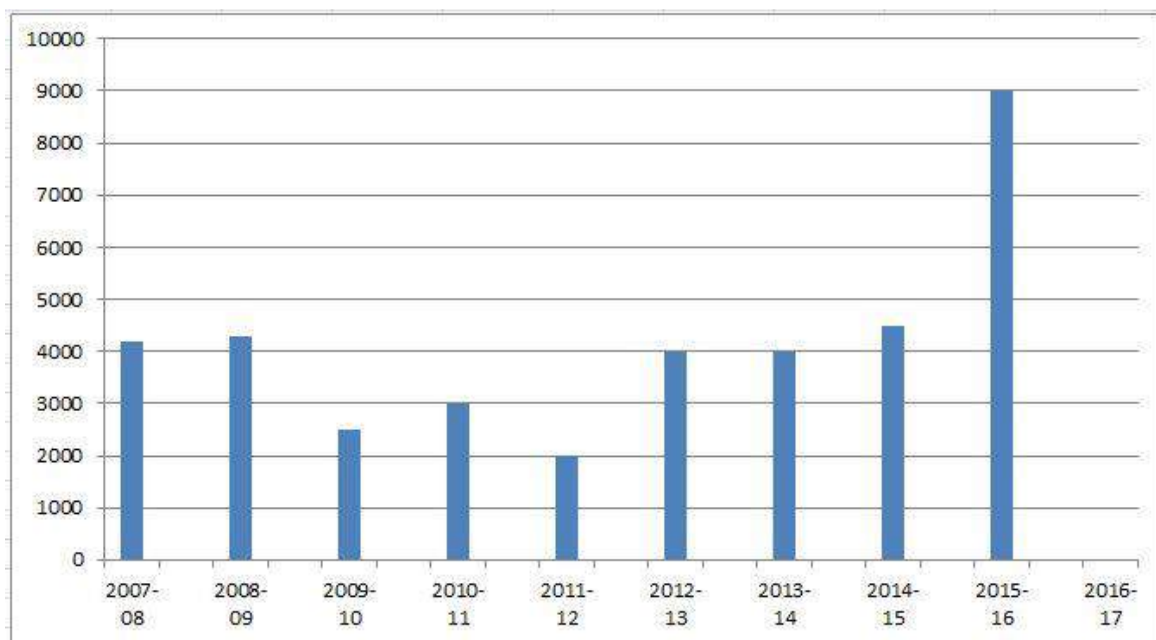








Chippenham rubbish (kg - blue) and recycling (kg - red)



Chippenham annual amounts of cess removed (galls)

Most of the charts are self-explanatory and are reasonably comparable from year to year, apart from the huge increase in water consumption this year, which

is explained by grazier Will Taylor filling his cattle water troughs from the base mains supply.

## **Health and safety**

Access structure and tree safety checks were carried out on 20 October. Clive Doarks and NE H&S specialist Marie Cookson visited on 19 May to carry out a H&S workplace assessment.

Riaz Lakhmi of KPMG carried out a H&S audit on 25 and 26 August. Machinery use/maintenance records were kept up to date, as well as HAV recording forms for all users of vibratory equipment. John White and an NNR volunteers carried out HAV testing on all our equipment on site on 11 October. As a result, the BCS came out as being even worse for vibration than we thought – new vibration mounts were fitted on 21 November, but to date the machine has not been re-tested. All the NNR risk assessments were reviewed during the year.

## **Volunteers**

We are extremely grateful to a number of volunteers who contributed greatly to the management and surveying of the reserve this year. In all, a total of 152 man-days were worked by volunteers, and this can be broken down into 78 days of practical management , 21 days of livestock checking , 49 days of survey work and 4 days of training.

With thanks to:

Bruce Martin, Phil Brown,  
Owen and Monica Marks  
Terry and Glen Riley, Nick Sibbett,  
Dale Hing, Alastair Burn,  
Christoph Zockler

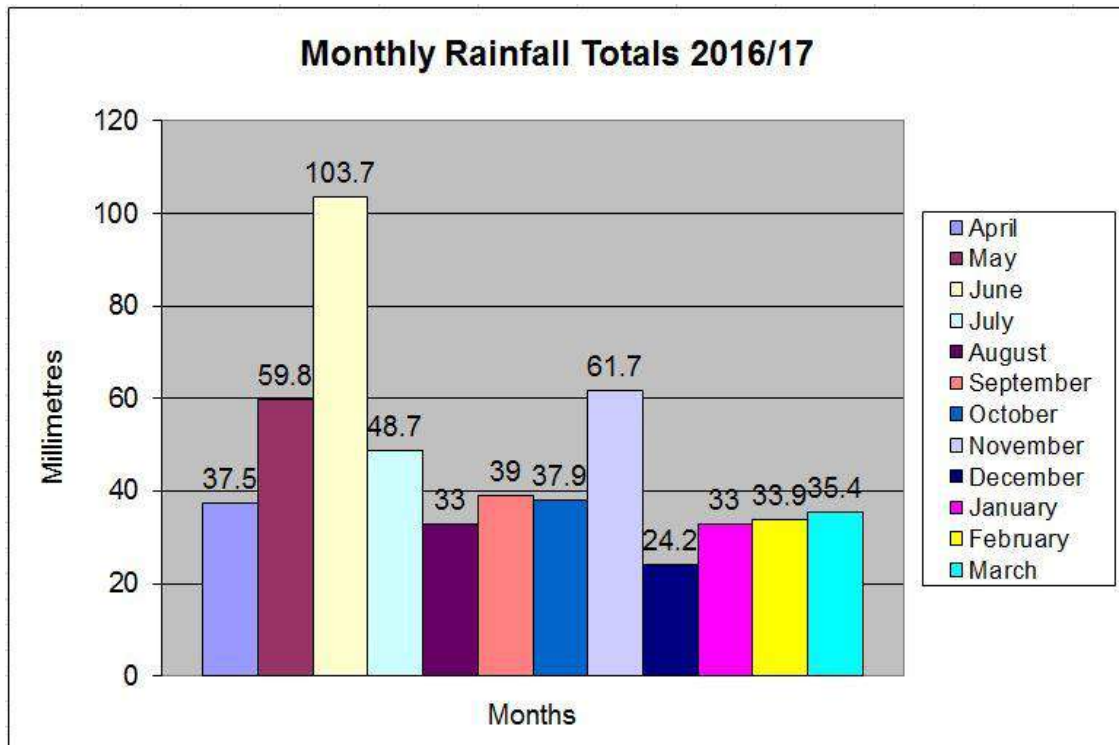
Dusk survey (3 days)

Cambridge Conservation Volunteers	Spent two days assisting with practical management works (16 days)
Phil Brown	Breeding bird survey (2 days)
Terry and Helen Moore	Amphibian and orchid surveys (7 Days)
Annie Osborn, Phil Brown Dale Hing, Pamela Abbott Phil Vigrass, Monica O'Donnell Alex Nichols, Ruth Angrave Bill Mansfield, Clive Sutton, James Hurst	Weekend buffalo checks (21 days)
Phil Brown, Annie Osborn, Sam Mortlock, James Hurst, Phil Vigrass Colin Bailey, Josh from On Track and the weekend volunteers	Practical management (62)
Alan Leslie	Plant recording
Mike Holdsworth, Peter Bircham et al	Bird ringing (37 days)

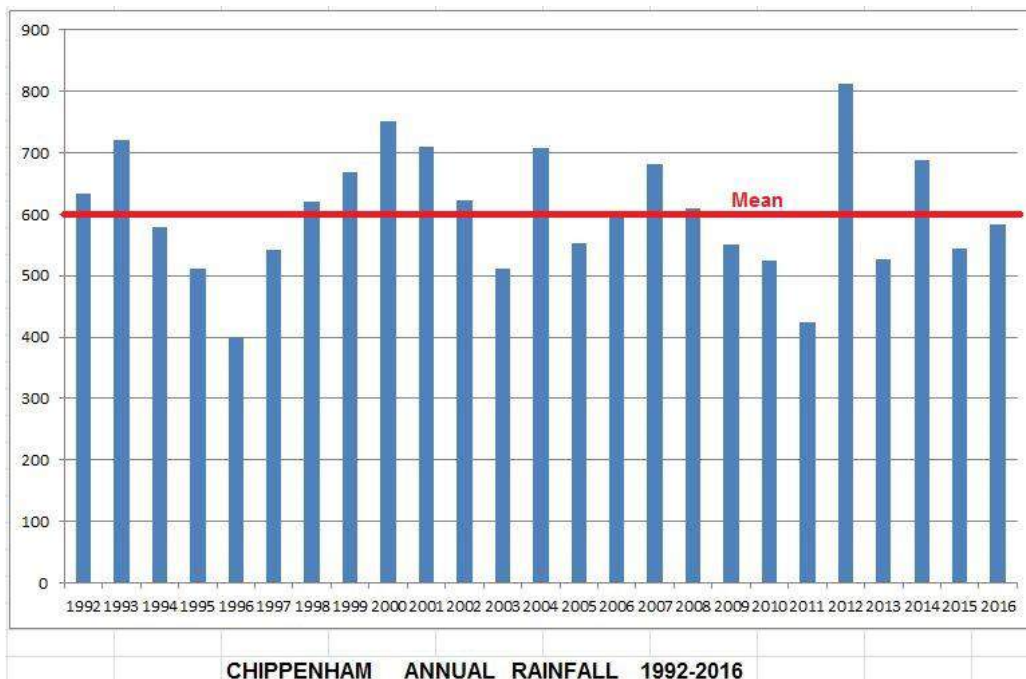
## **Survey and Monitoring**

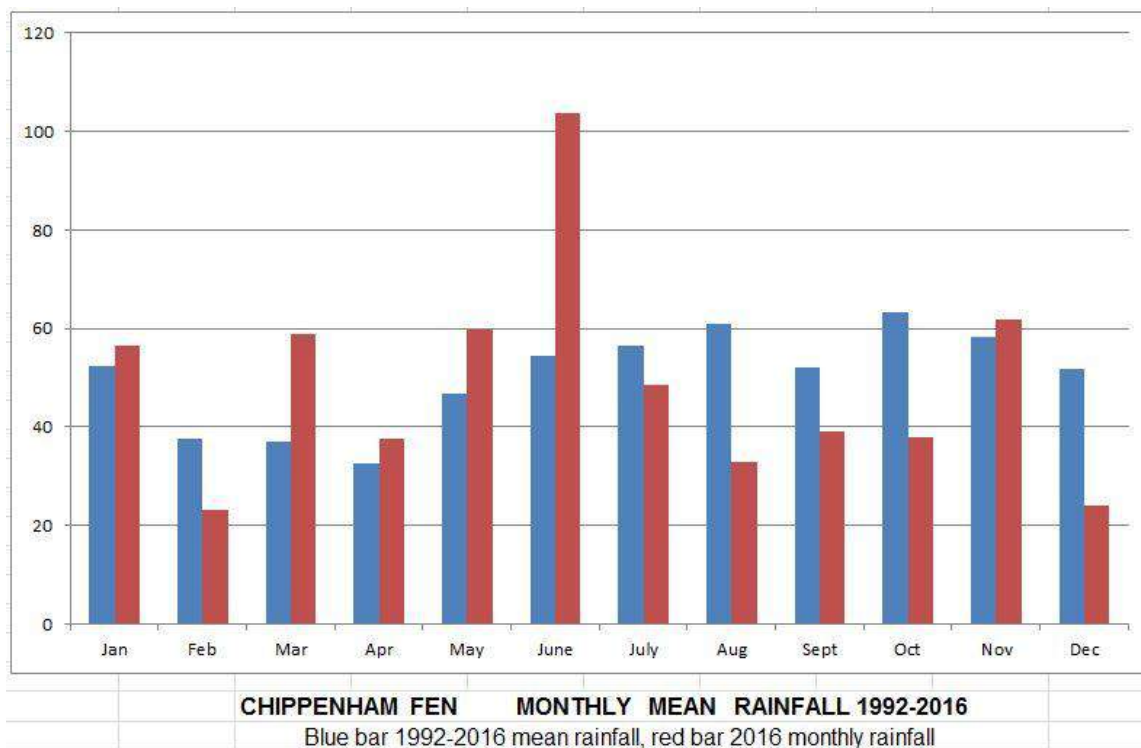
### **Water levels/Rainfall**

Dipwell readings were taken every two weeks, and rainfall readings weekly. All data were entered onto the dipwell spreadsheet.



Rainfall in 2016 was a little below the long term average (red line in the chart below). In general, the first half of the year was wetter than average, especially June, with the second half of the year having below average rainfall.





## Birds

### Woodland CBC

For the fifth year Phil Brown carried out a modified woodland CBC in compartments 3 and 12. Phil has prepared a detailed report which is held in the NNR files. This is the final year of gathering baseline data – the assumption is that the survey will be repeated if any woodland management work is carried out.

### Woodcock survey

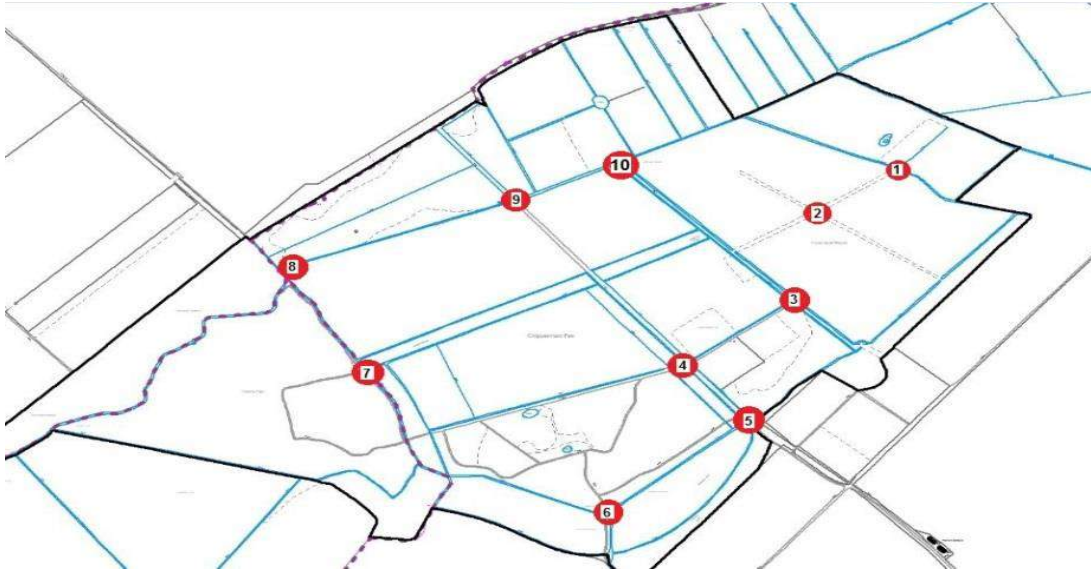
The annual dusk survey was carried out on 24 May. Below is a short report of the evening:

#### Chippenham Fen Dusk Woodcock Survey 24 May 2016

The evening was generally overcast and breezy, feeling colder than the recorded 9 degrees C. Despite this, there was a fair amount of woodcock roding activity, at least at some points.

This year we again recorded woodcock in two ways: using our 'traditional' method of mapping roding birds seen from each point for one minute periods every ten minutes between 2020hrs

and around 2140hrs, plus recording every woodcock sighting on BTO woodcock survey forms. Between us we covered 10 points around the fen:



## Mapping

The table below summarises the results for the one minute mapping periods:

Time period	Maximum number of definitely different birds	Maximum number of possibly different birds recorded
2020-21 hrs	5	7
2030-31 hrs	5	7
2040-41 hrs	0	0
2050-51 hrs	4	5
2100-01 hrs	4	4
2110-11 hrs	5	6
2120-21 hrs	1	3
2130-31 hrs	0	0

As can be seen, from the mapping of roding flights the maximum number of definitely different birds recorded in any one minute period was 5 – one up on last year. However, it is possible that up to 7 different birds were roding during the 2020-21 and 2030-31 periods.

## BTO survey forms

Recording all woodcock fly-pasts during the evening showed that there was considerable activity throughout. The table below shows all the woodcock seen and/or heard (recorded contacts) from each point between 2020hrs and end of recording at 2141hrs. There were several recorded contacts before 2020, but these have not been included in the analysis.

Point	Observer 2016	Single bird contacts	Two birds together contacts	Three birds together contacts	Total recorded contacts 2016	Total recorded contacts 2015
1	Nick	5			5	28
2	Terry & Glen	14	1		16	16
3	Alastair	24	6	3	45	56
4	Bruce	5	1		7	19
5	Mike	19	1		21	
6	Dale	2	1		4*	23
7	Chris & Christoph	22	5	1	35	25
8	Ruth	17	5		27	16
9	Phil	25	3		31	13
10	Owen & Monica	12	2		16	

\*recording finished prematurely at 2050hrs

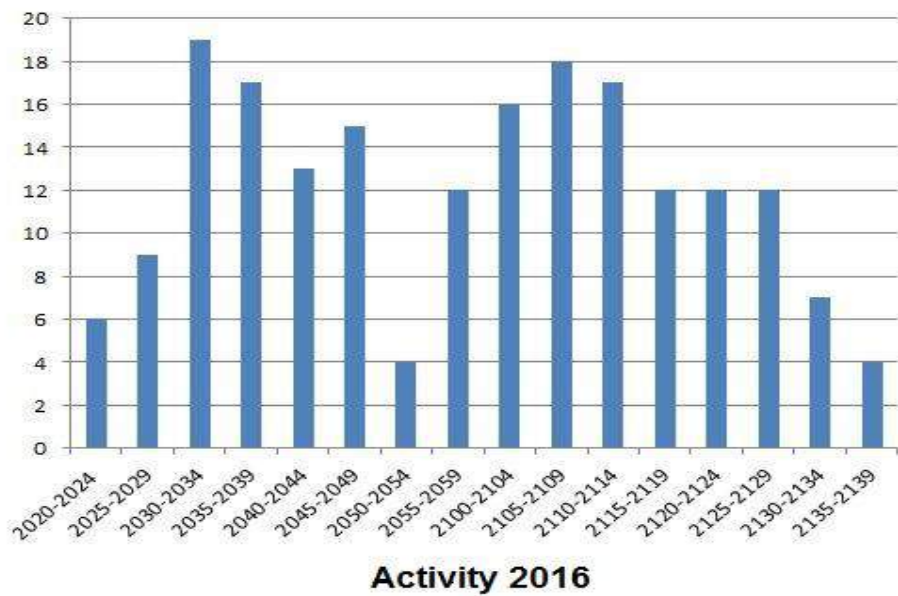
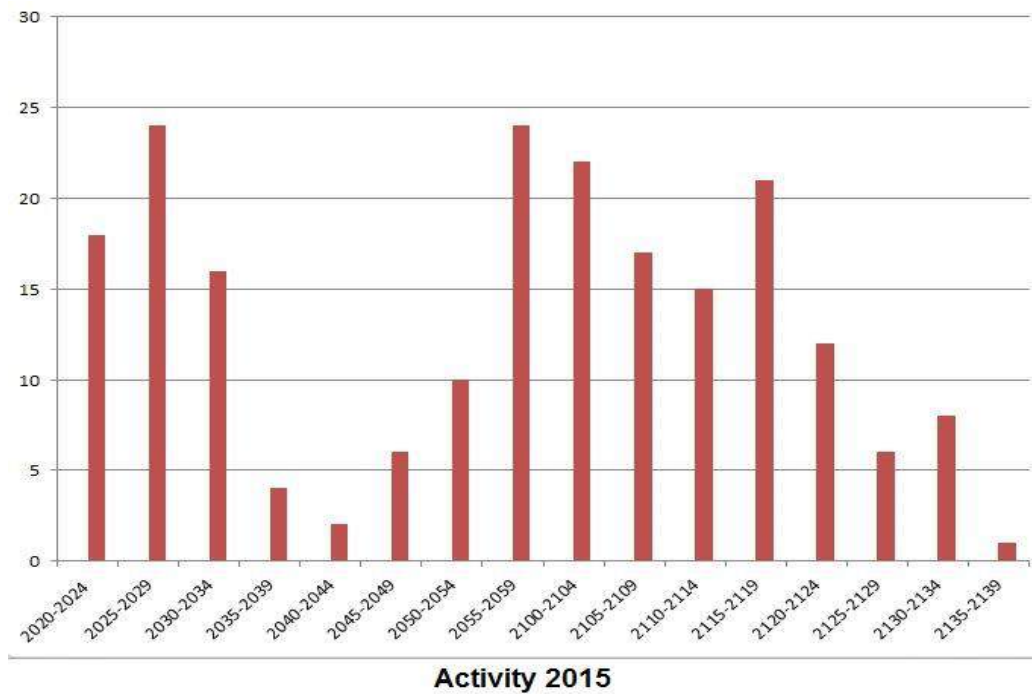
A graph shown on the BTO website shows the relationship between numbers of roding males known to be present and the number of recorded contacts, using data from 43 different woods. The graph is not quite a straight line correlation, but the number of individual males is related to the number of contacts, for example 10 contacts suggests 4 different individual males and 20 contacts 6-7 individual males. The graph gradually flattens out with increasing contacts, so it cannot be extrapolated that the 45 contacts recorded by Alastair at point 3 represents 20+ individual birds, but it does seem that the number of individual birds recorded at five of the points was at least 6, and at four of the points the number of individual birds involved was probably more than 7. Interestingly, most points in the eastern part of the Fen showed slightly less activity than in 2015, whereas points in the western half of the Fen showed an increase in activity compared with last year.

Lumping all the woodcock contacts from all the points, there were variations in activity during the evening:

Time period	Woodcock contacts 2016	Woodcock contacts 2015
2020-2024 hrs	6	18
2025-2029	9	24
2030-2034	19	16
2035-2039	17	4
2040-2044	13	2
2045-2049	15	6
2050-2054	4	10
2055-2059	12	24
2100-2104	16	22
2105-2109	18	17
2110-2114	17	15
2115-2119	12	21
2120-2124	12	12

2125-2129	12	6
2130-2134	7	8
2135-2139	4	1

The charts below show woodcock activity in terms of recorded contacts through the evening, for 2015 and this year.





In both years there has been a lull in activity mid-way through the evening, but one can only speculate on the significance of this, if any.

#### **Other species recorded**

Greylag	43+ flew over
Lesser black backed gull	9 flew over
Buzzard	1 in North meadows
Hobby	One seen by several observers
Marsh Harrier	At least two seen in Poors Fen and elsewhere
Song Thrush	3+ singing
Barn owl	one recorded
Reed Warbler	2 singing
Crossbill	One heard calling in 40 acre wood by Owen and Monica

No grasshopper warblers were recorded this year, perhaps not surprising in the cool and breezy conditions.

Many thanks to all who participated on the night – your help was much appreciated.

Mike Taylor

26 May 2016

Chris Hainsworth, assisted by Sam Mortlock and Ruth Angrave, repeated the BTO national woodcock survey, counting birds at dusk on three occasions in May and June from a point in Poors Fen.

#### **Bird ringing**

Michael Holdsworth, Peter Bircham and others continued to ring birds at the Fen through the year; mostly near the feeders in the shed area in winter and spring, moving out into Poors Fen later in the summer to concentrate on warblers (standards sessions).

Here is Michaels report of the 2016 standards sessions:

## **Chippenham West 'Standards' 2016**

2016 was the third year we have run this CES-lite programme at the Fen. The methodology now seems proven, with sufficient birds caught to provide a measure of year-on-year indexation, both of adult abundance and survival; and at least an early-season hint of breeding season fledging productivity. The Standards area is on Snailwell Pools Fen, around Malcolm's Pond, the eastern part of Compartment 4.

Sessions ran on 24 May, 21 June and 28 July. The first and second aimed to focus on the number of breeding pairs, and the second and third to measure productivity, hopefully before juvenile dispersal started to confuse the picture. Nets were opened for six hours from sunrise. No sound-lures were used. The ringers involved were Michael Holdsworth, Peter Bircham, Carole Davis, Gareth Davies and Caroline Brighton.

### **Results**

The weather was kind to us for each of the three sessions. We caught 132 different individual birds (76 adults, and 56 juveniles) in 138 captures. This was fewer birds, and fewer species (just fourteen) than in 2014 and 2015.

Of the species previously captured on Standards sessions, in 2016 we didn't catch Cuckoo, Grasshopper Warbler, Lesser Whitethroat, or Bullfinch, species which may or may not breed precisely within our exact study area. And of course the aggregate of the three sessions is after all only 18 hours of catching. Four other absent species, however, which had accounted for 23 captures in 2015 (and 32 in 2014), almost certainly do breed. These are Willow Warbler, Goldcrest, Long-tailed Tit, Coal Tit and Treecreeper. The reason that none was caught is probably down to the fact that we encountered no tit/Chiffchaff flock on the July session, where juveniles of these species can usually be relied upon to be tagging along with young Blue and Great Tits. This is quite apparent from the Table, where the numbers of the two common tit species are also well down; evidence from elsewhere suggests they had a poor season. Taken together these reductions are

quite enough to account for the overall drop in total numbers – to 132 from 177 in 2015 and 219 in 2016.

Other absent passerines – Song Thrush, Dunnock, Chaffinch, Goldfinch, Greenfinch – almost certainly do not breed anywhere nearby.

The table below summarises the three catches. ‘Old Adults’ are previously ringed birds.

	‘Old’ adults	New adults	Adults	Juvs	2016 Total	2015 Total	2014 Total	‘Old’ adults		
								5	2.4.6	2.4.6
								2015		2014
<i>Cuckoo</i>							1			
Kingfisher				1	1		2			
Wren	5	8	13	9	22	25	29	2	1	2
Robin	1	2	3	8	11	6	7		1	
Blackbird		1	1		1	1	1			
<i>Grasshopper Warbler</i>						1				
Sedge Warbler	1	3	4	3	7	8	14		1	
Reed Warbler	6	19	25	4	29	31	49	3	1	2
<i>Lesser Whitethroat</i>						1				
Garden Warbler				1	1	2				
Blackcap		5	5	3	8	11	11			
Chiffchaff	2	12	14	16	30	36	27		2	
<i>Willow Warbler</i>						2				
<i>Goldcrest</i>						1	2			
<i>L T Tit</i>						18	28			
Marsh Tit				2	2		3			
<i>Coal Tit</i>						2				
Blue Tit		3	3	4	7	15	28			
Great Tit	2	3	5	4	9	7	9			2
<i>Treecreeper</i>							2			
Jay		1	1		1	1				
<i>Bullfinch</i>						1				
Reed Bunting		2	2	1	3	8	6			
Total:	17	59	76	56	132	177	219	5	6	6

The resident species, Wren, Robin, Blackbird, Reed Bunting show very steady figures. Reed and Sedge Warblers show greater variation. There are probably not

the number of Reeds suggested by these results within the Pond area as we witness again the continual churn of different adults – possibly late arrivals, unmated birds or failed breeders from elsewhere. It's also nice to see the pattern emerging of site-faithful returners – in time this should build to birds potentially as old as eight or nine years.

Five birds ringed elsewhere were captured in 2015. A January juvenile Siskin had been ringed near Brandon in October 2015. Two Long-tailed Tits had been ringed together on the same day at Wicken Fen in September 2015. There were two adult Reed Warbler controls. A juvenile ringed at Ely Beet Pits in August 2015 was on the Fen in 2016, probably as a breeding adult. And a French-ringed juvenile from August 2009, near Lille, had most likely been a local-born bird caught on its first of seven journeys south of the Sahara..

## **Amphibians**

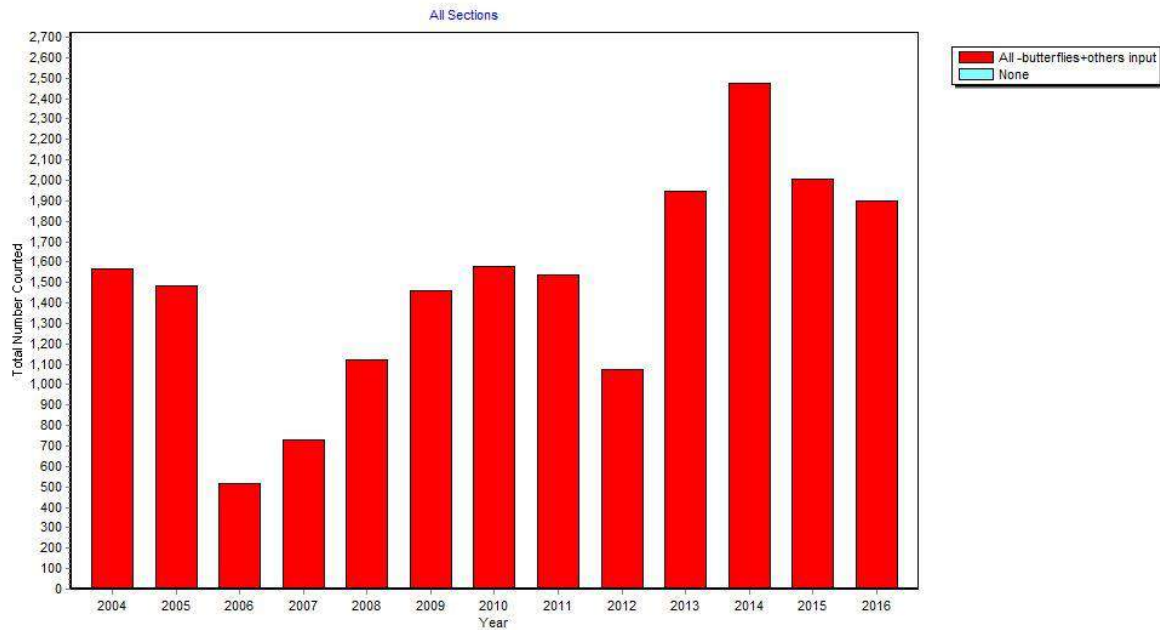
Dr Terry Moore and wife Helen continued to look at amphibians on the Fen in 2016 and 2017. On 29 March 2017 they recorded 22 smooth newts and lots of frog and toad spawn in East meadows pond. 40+ toads were active in the central ditch in compartment 2 on 10 March.

## **Invertebrates**

### **Butterflies**

The butterfly transect was carried out weekly between April and September. Data was entered online and onto Transect Walker and sent to the National Butterfly Monitoring Scheme.

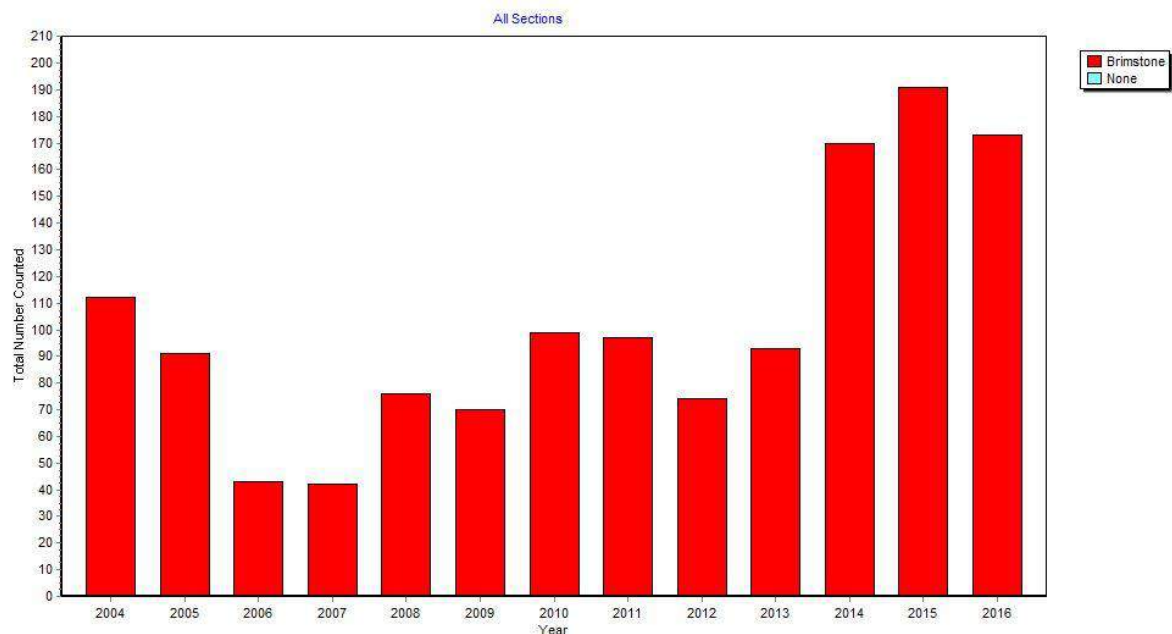
2016 proved to be a reasonable year for butterflies on the Fen, as shown on the chart below:

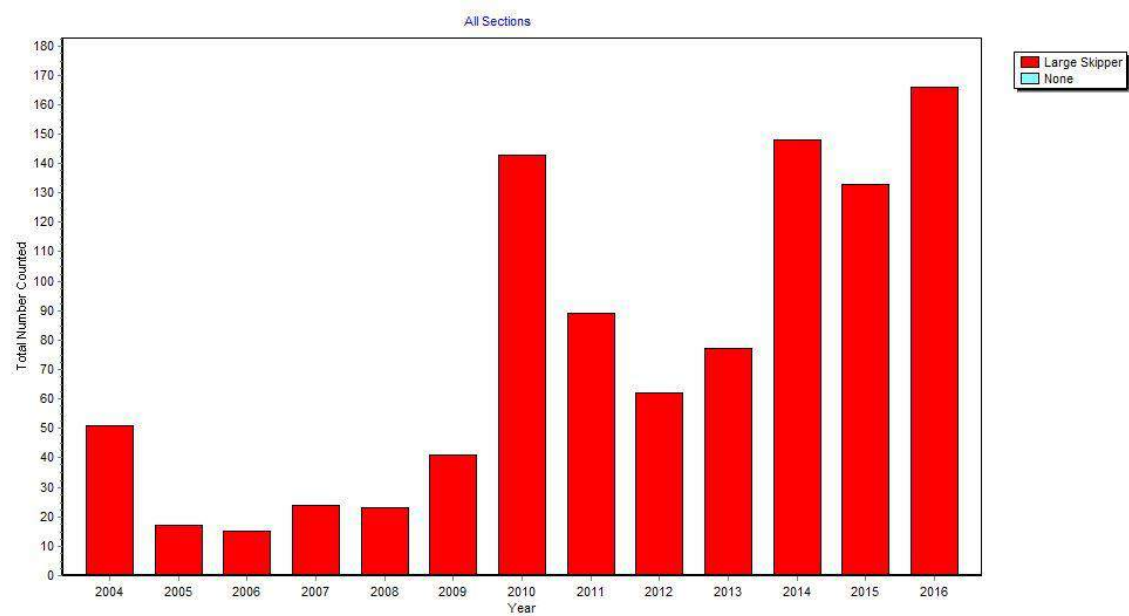
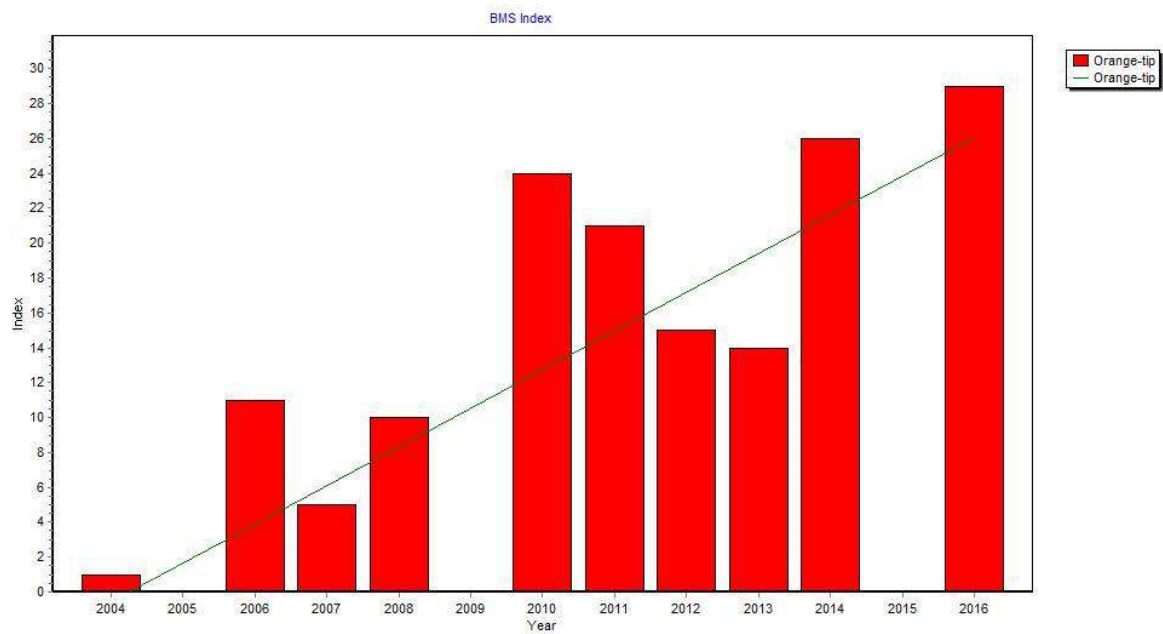


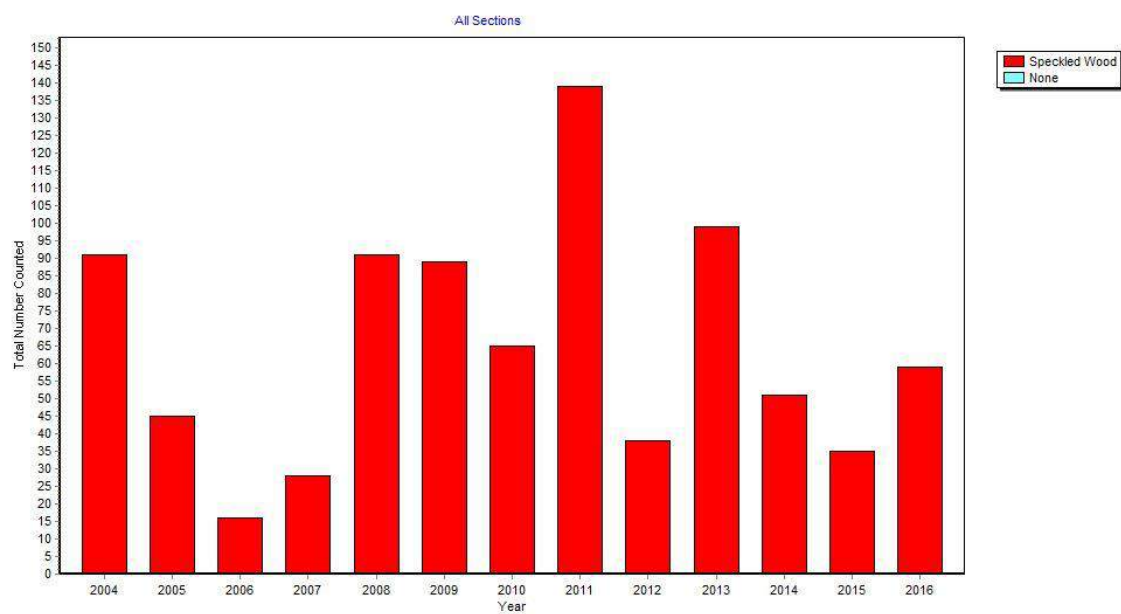
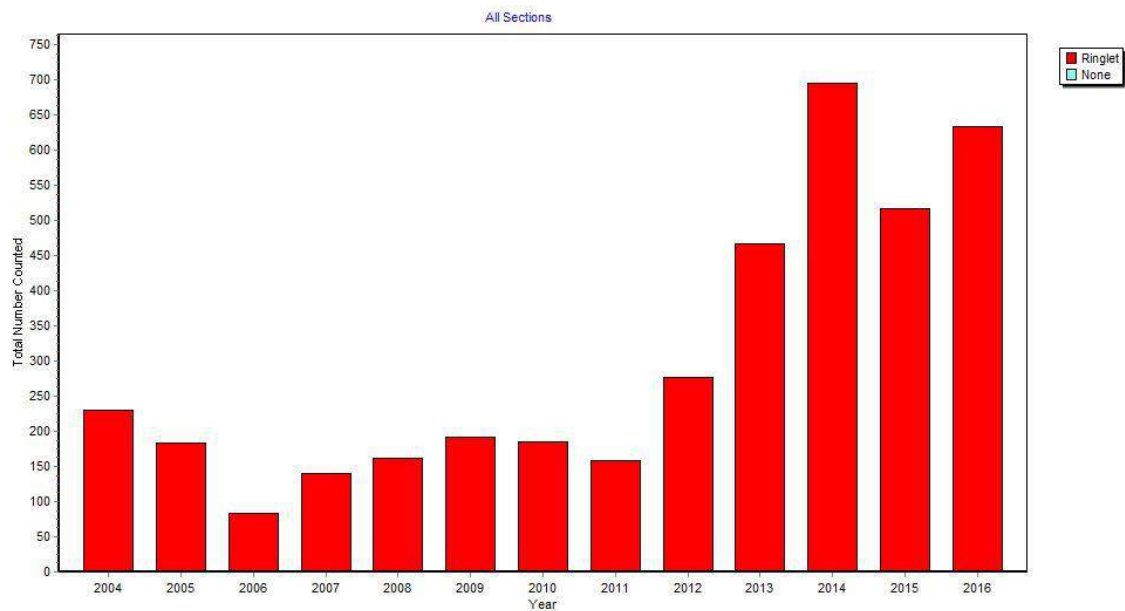
## Chippenham Fen Butterfly transect–total butterflies recorded

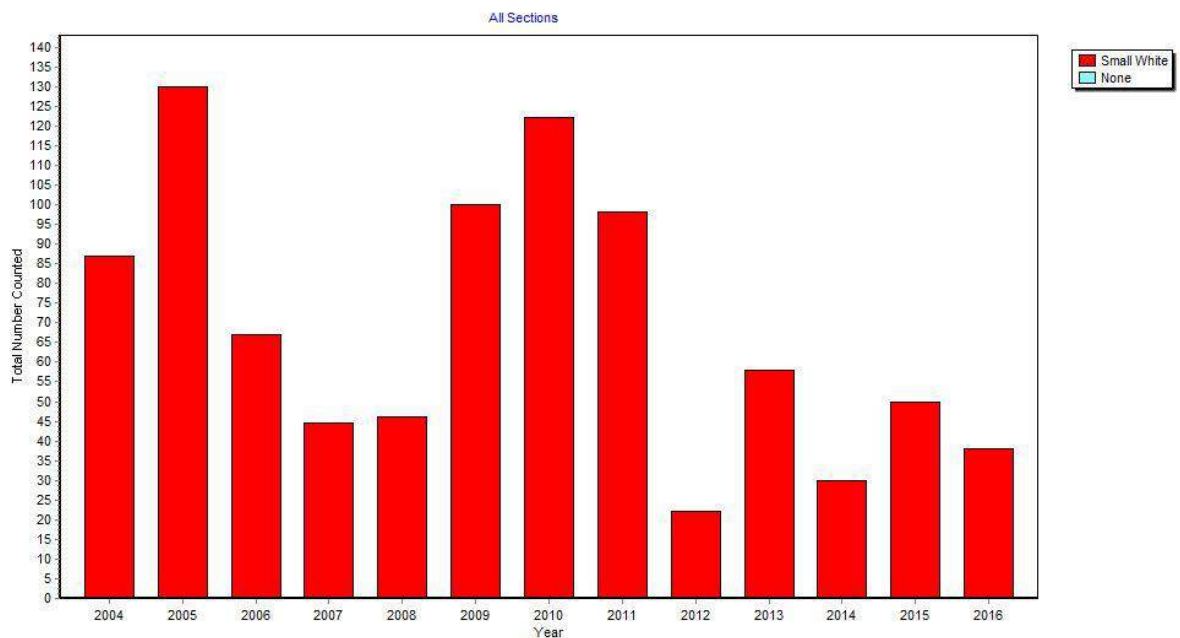
Overall, seven species are showing an upward trend in numbers, and a further eight species appear stable. Only four species exhibit a possible decline; small white, green hairstreak, brown argus and speckled wood.

The charts below show annual indices for some of these species:



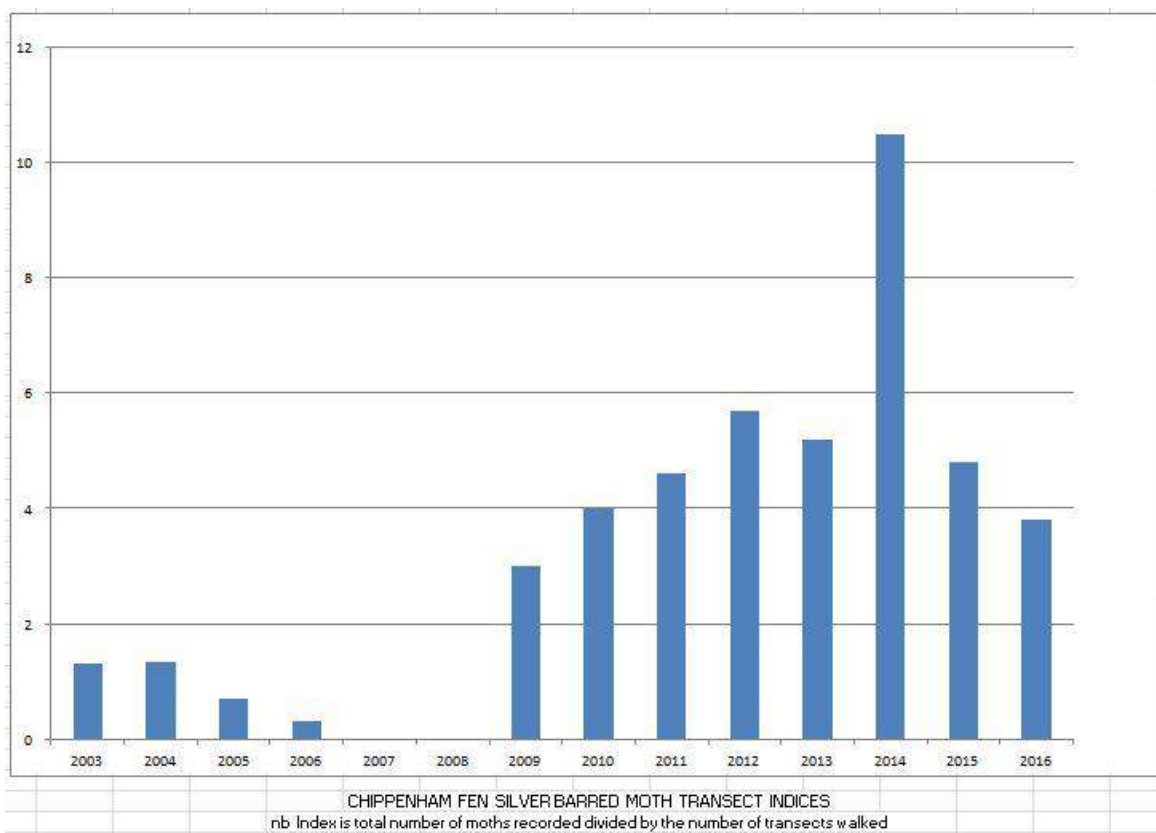






## Moths

The first silver barred moth was seen on 23 May. Numbers were down again this year, and the season was short, with none seen after 27 June.



## Silver barred moth annual indices



The index in the above table is the total number of moths recorded divided by the number of transects walked during the season.

CH, Ruth Angrave and MT put a bucket light trap outside the shed on a number of occasions early in the season.

## **Plants**

### **Cambridge milk parsley**

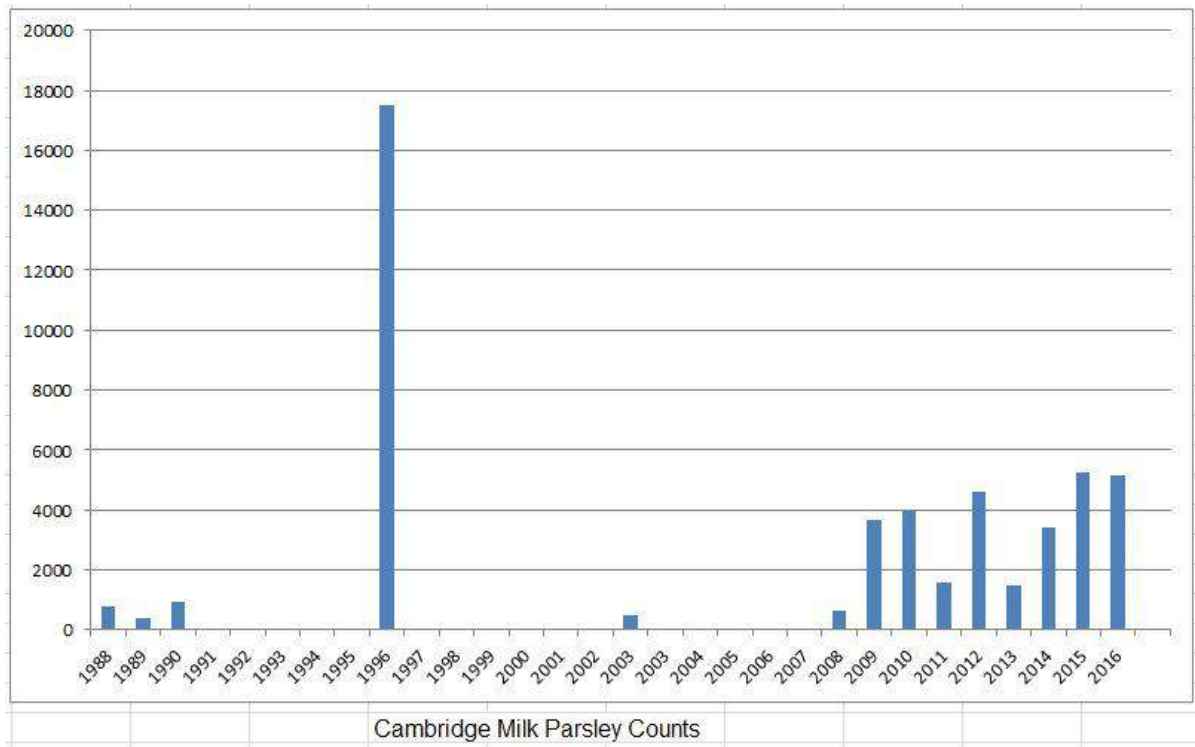
We undertook the Milk parsley survey on Chippenham Fen between 25<sup>th</sup> July and 8<sup>th</sup> August 2016.

On the 25<sup>th</sup> July and 4<sup>th</sup> August Mike Taylor carried out counts in Compartments 1,2,8 and Baxter Ride west. On 29<sup>th</sup> July Mike Taylor and Chris Hainsworth counted in the black bog rush area of compartment 11. On 5<sup>th</sup> and 8<sup>th</sup> August Mike Taylor and Chris Hainsworth counted the main areas in compartments 1, 10 and 11.

The recording was done by walking in a line and counting plants in flower. Some plants had 2-3 flower heads and these were counted as 1 record. Non flowering plants were not counted.

A total of 5152 flowering plants were recorded, only slightly down on the 2015 count, which was the highest at the site this century. Our subjective impression that that plants seemed taller and more vigorous this year and many had multiple flower heads.

The chart below shows results from all the counts on file:



### M13 monitoring

Sue Shaw and Ros Tratt did not monitor quadrats in M13 areas this year.

### Botanical recording

Alan Leslie, the botanical recorder for Cambridgeshire, made several visits to the Fen through the year, continuing to compile an up to date species list for the reserve.

A potentially new site for adders-tongue was discovered, on the ungrazed part of Baxter east ride – over 100 plants were counted.

### Orchid survey

NNR volunteers Terry and Helen Moore spent some time studying orchids on the reserve.

2016 was generally quite a reasonable year for some of the scarcer orchids: 30 bee orchids were recorded in compartment 1, 156 fragrant orchids on Baxter east and in compartments 1 and 2, 8 marsh helleborine were found, and 78 twayblade were recorded, with over 50 in East meadow.

No *ochroleuca* Early Marsh orchids were found this year – the last flower was seen in 2004.

## **Bogbean**

The first flowers were noted on 11 May, and the peak count at the main site in compartment 4 was 166 on 19 May. The smaller patch on Ian Mcleans plot had only 2 flowering plants on 16 May, together with 40+ non flowering plants.

## **Ash die-back**

Signs of ash-dieback continued to be obvious around the reserve.

## **CEH/NE long term monitoring network (LTMN)**

MT carried out the breeding bird survey (BBS), using the BTO breeding bird methodology, and the required two visits were made on 21 April and 27 May. Below are summarised the totals for the early and late visits over the last four years:

### **Early Visit**

	<b>20/04/2013</b>	<b>22/04/2014</b>	<b>23/04/2015</b>	<b>21/04/2016</b>
Blackbird	8	9	8	9
Blackcap	7	5	11	5
Blue Tit	17	12	19	17
Bullfinch				
Buzzard	2	1	1	2
Canada Goose		12	3	2
Carrion crow	2	3	6	6
Chaffinch	4	4	6	
Chiffchaff	12	12	16	15
Coal Tit	3	1	3	5
Cuckoo			1	
Goldcrest	1	1	1	1
Grasshopper				
Warbler	4	1	4	7
Great spotted woodpecker	6	3	2	
Great Tit	9	11	16	4
Green Woodpecker	6	4	6	4
Grey Heron	1			
Greylag	2	4	7	
Jackdaw	11	2	16	7
Jay			3	1

Lapwing			1	
Lesser Redpoll				3
Linnet				
Long tailed Tit			4	6
Magpie	1		1	
Mallard	2	1	2	4
Marsh Harrier			1	2
Marsh Tit		1	1	1
Mistle Thrush	1	1		
Moorhen	2	2	2	
Nuthatch	5	1	1	2
Pheasant	3	7	11	8
Reed Bunting	8	10	7	10
Reed Warbler		3	4	1
Robin	12	16	15	14
Rook	7		1	
Sedge Warbler	8	14	11	11
Skylark	2	1	2	2
Snipe	1			
Song Thrush	1	2	5	3
Stock Dove	3	2	2	3
Treecreeper	6	2	3	2
Water Rail	2		2	
Willow Warbler		1		
Woodpigeon	32	19	33	30
Wren	34	39	51	41
Yellowhammer		1		
 Birds	 225	 208	 289	 228
Species	34	34	39	31

Late Visit

	05/06/2013	30/05/2014	21/05/2015	27/05/2016
Blackbird	10	12	14	16
Blackcap	4	6	3	6
Blue Tit	8	21	15	13
Bullfinch				2
Buzzard			1	1
Canada Goose			3	2
Carrion crow		7	4	5
Chaffinch	8	5	3	2
Chiffchaff	8	10	16	14
Coal Tit	1	1	1	2
Cuckoo	3	2	1	1
Dunnock			1	
Goldcrest		3		
Grasshopper				
Warbler	3	4	2	2
Great spotted woodpecker	2	3	3	1
Great Tit	2	7	13	6
Green Woodpecker	3	9	1	1
Grey Heron				
Greylag	2		3	2
Jackdaw	17	18	14	19
Jay	2			1
Lapwing		3		
Lesser Whitethroat			1	1
Linnet				2
Long tailed Tit	8	2	20	
Magpie	1	2	2	1
Mallard	2	1	4	2
Marsh Harrier	1		1	1
Marsh Tit			1	
Mistle Thrush				
Moorhen		1	2	
Nuthatch	1		1	3
Pheasant	5	6	5	7
Reed Bunting	7	7	15	8
Reed Warbler	19	20	15	16
Robin	7	15	8	11
Rook	8			
Sedge Warbler	4	8	7	4

Skylark	2	3	2	3
Snipe				
Song Thrush	5	2	3	5
Stock Dove	3	1	2	4
Treecreeper		3	1	3
Water				
Rail	1	2		
Whitethroat			1	
Willow Warbler	2			
Woodpigeon	31	25	23	38
Wren	26	36	39	44
Yellowhammer				
birds	206	245	251	249
Species	32	31	37	35

### **Species surveillance (Biodiversity 2020 s.41 species)**

#### **Grey carpet moth**

There were no records this year.

#### **Ochroleuca**

Despite searches in the last known location in compartment 2, no flowering plants were found. The species has not been seen in flower here since 2004.

#### **Rossers sac spider**

Work continued to try and develop a protocol for monitoring this species. However no systematic searching for the species was carried out.

### **Miscellaneous species records**

#### **Butterflies**

The first butterflies of 2016 were brimstone and small tortoiseshell, on 13 March. The latest recorded butterflies of 2016 was a red admiral on 17 November. The first butterflies of 2017 were small tortoiseshell on 7 March, and brimstone and comma on 9 March.

## Odonata

There was a hairy dragonfly near the shed on 13 May.

## Other invertebrates

There was a mini-plague of ladybirds (presumed harlequin) on the fen on 28 October – there were clouds of the beetles around the shed and main gate.

We participated in a Public Health England project to monitor mosquitos at various sites around the country, which has been running since 2010. A mosquito trap was set up at the rear of the shed on 3 August, by P.hD. student Anthony Abbot, and he visited every couple of weeks until 28 September to empty the trap. We retained the trap over the winter and will catch mosquitos again in 2017. A report on the species caught at Chippenham in 2016 was supplied by Dr Ben Cull:

### Seasonality and abundance of mosquitoes at Chippenham Fen 2016

Mosquito species	Mar 1	Apr 2 - 3	May 4 - 5	Jun 6 - 7	Jul 8 - 9	Aug 10 - 12	Sep 12 - 14	Oct 15 - 16
<i>Anopheles claviger</i>								
<i>Anopheles plumbeus</i>								
<i>Coquillettidia richiardii</i>								
<i>Culex pipiens</i>								
<i>Culiseta annulata</i>								
<i>Culiseta morsitans</i>								
<i>Ochlerotatus cantans/annulipes</i>								
<i>Ochlerotatus caspius</i>								
<i>Ochlerotatus punctor</i>								

Green = present; White = absent; Shaded = trap not run.

Nine species of mosquito were trapped over the 2016 season. The most numerous species were:

*Coquillettidia richiardii*

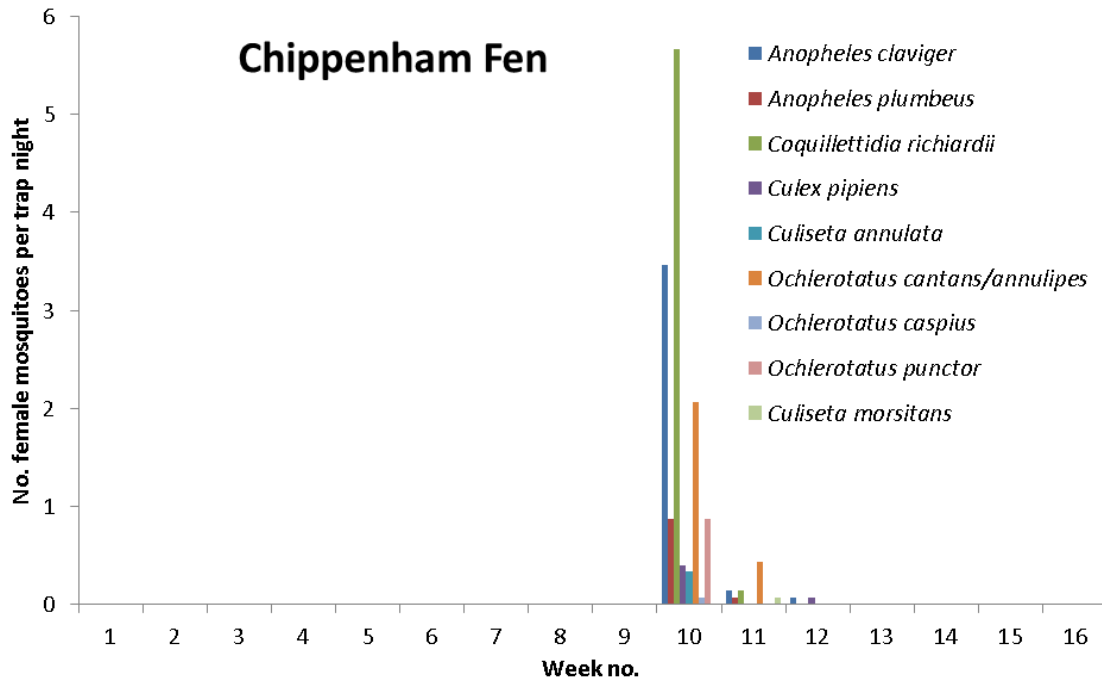
Breeds in vegetated pools & ditches; feeds on mammals & birds; active May – Sep.

*Anopheles claviger*

Breeds in pools, ponds, ditches, etc.; feeds on humans & other mammals; active Feb-Sep.

*Ochlerotatus cantans/annulipes*

Breed in woodland pools; feed mainly on mammals; active Apr – Sep.



## Mammals

A hare was noted in compartment 1 on 13 December.

An unidentified bat was flying around the shed at dusk on 16 November.

## Birds

Bird records are given as an appendix to this report.

## Visitors/Meetings/Events

Alistair Helliwell gave CH and MT CMSi training on 26 April.

Catherine Weightman and Kate Fagan met CH regarding a wet grassland bid on 13 May

Caroline Cavill and Chris Campling met HLF trainee Ruth Angrave on 26 May

CH led guided walk for 12 members of Barrow Garden Club on 3 June

Ruth Angrave and Kate Fagan carried out CSM ditch assessments



SRM Ian Nichol and two RMs visited on 17 June

Ross Holdgate and Sonja Kaup ran a Fen Introduction Course for 15 people on 28 June

CH attended a visit by the Cambridgeshire Flora Group

CH gave guided walk to the Cambridge U3A botany group (including Alan Leslie and Phillip Oswald)

New Brecks team leader Kate Whitehead visited on 2 August.

Lynda Foster met CH on 13 September regarding project to encourage more volunteers at Chippenham

CH/MT met Katy Smith (NE Woodwalton), Kate Fagan and Martin Lester (National Trust Wicken) for informal fen managers meeting on 2 December.

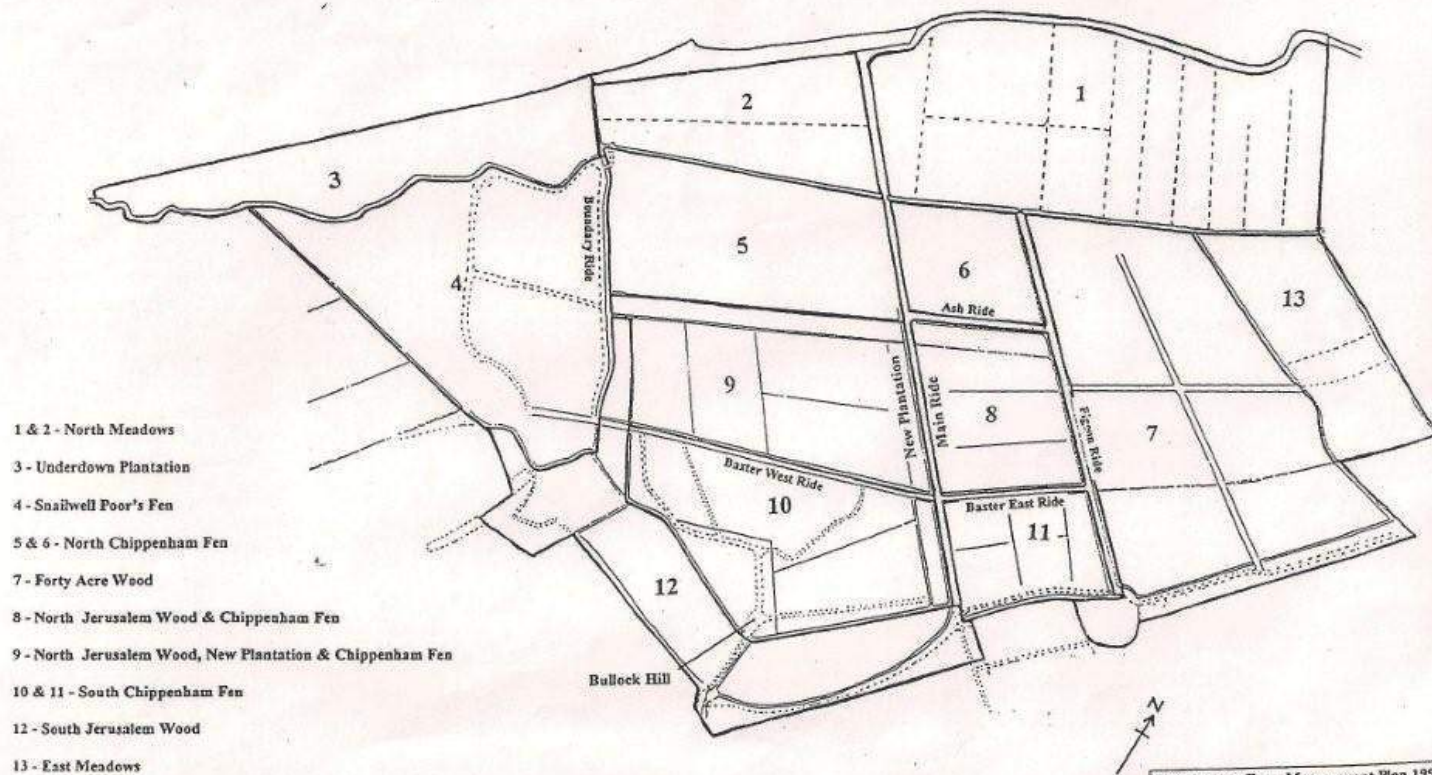
CH met dipterist Mark Welch regarding malaise trapping in 2017 on 2 February.

## **HLF trainee project**

Ruth Angrave completed her 18 month traineeship on 30 June. In her short time with us she became a valued member of the team and we wish her well for the future.

**Michael Taylor**  
Reserve Manager  
May 2017

## MAP 1 COMPARTMENTS

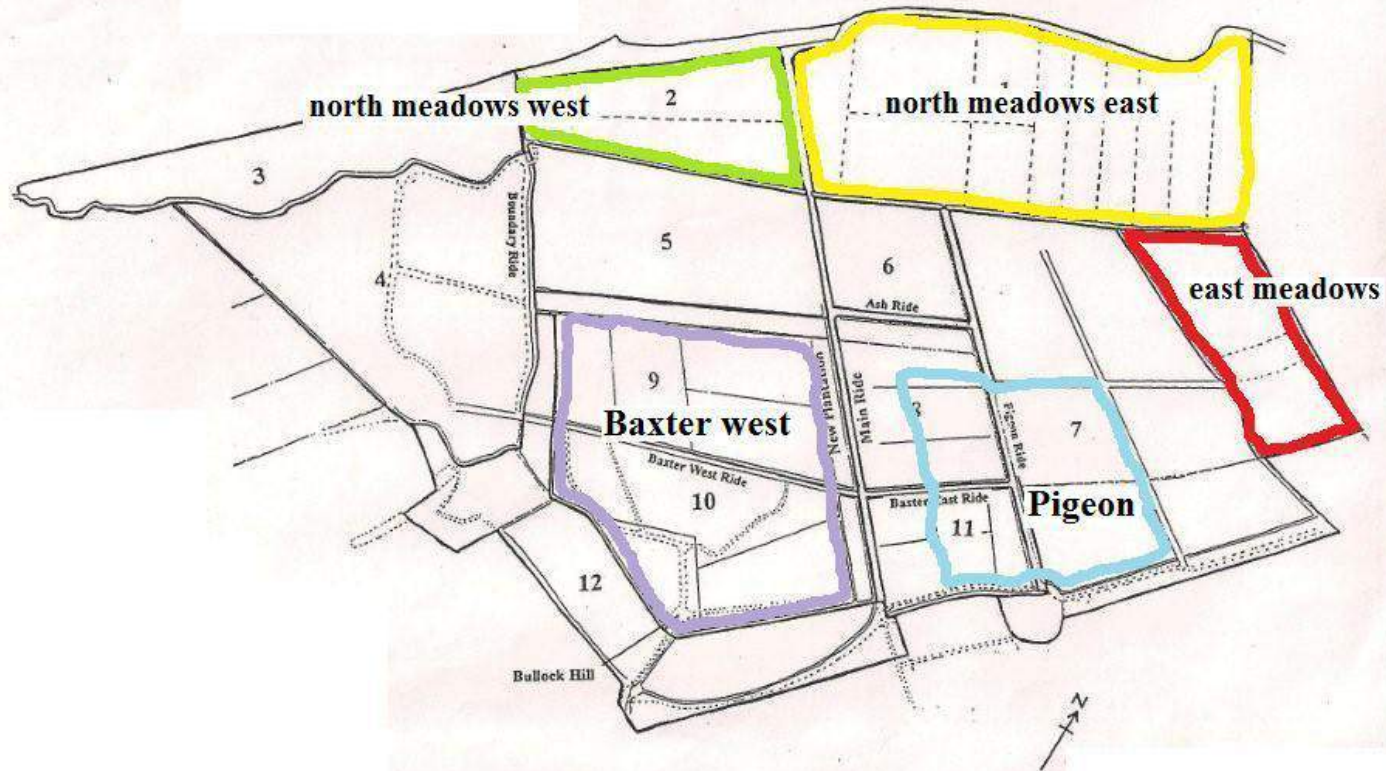


Chippenham Fen - Management Plan 1996

Figure 3 - Compartment Map

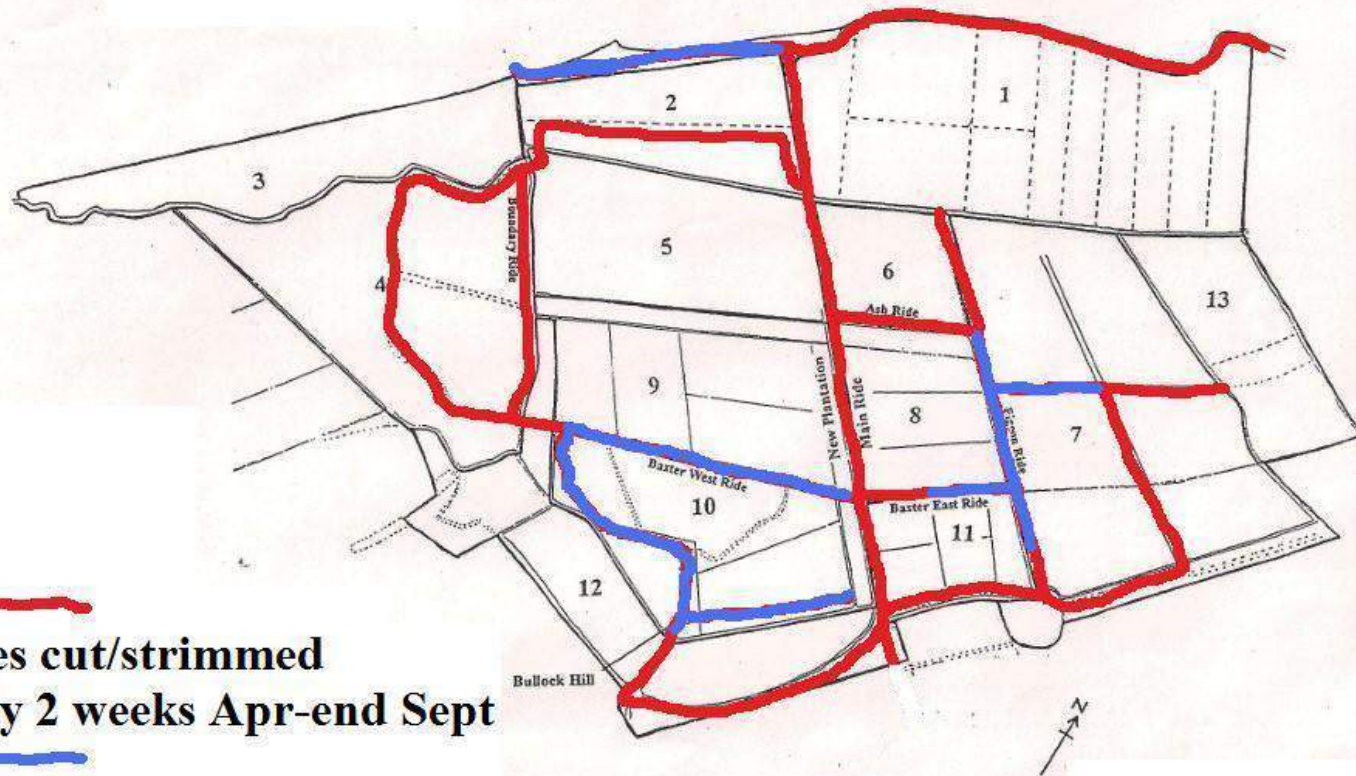
East Midlands Environmental Consultants  
110 Smeinton Dale, Nottingham, NG3 7DN

## MAP 2 GRAZING AREAS



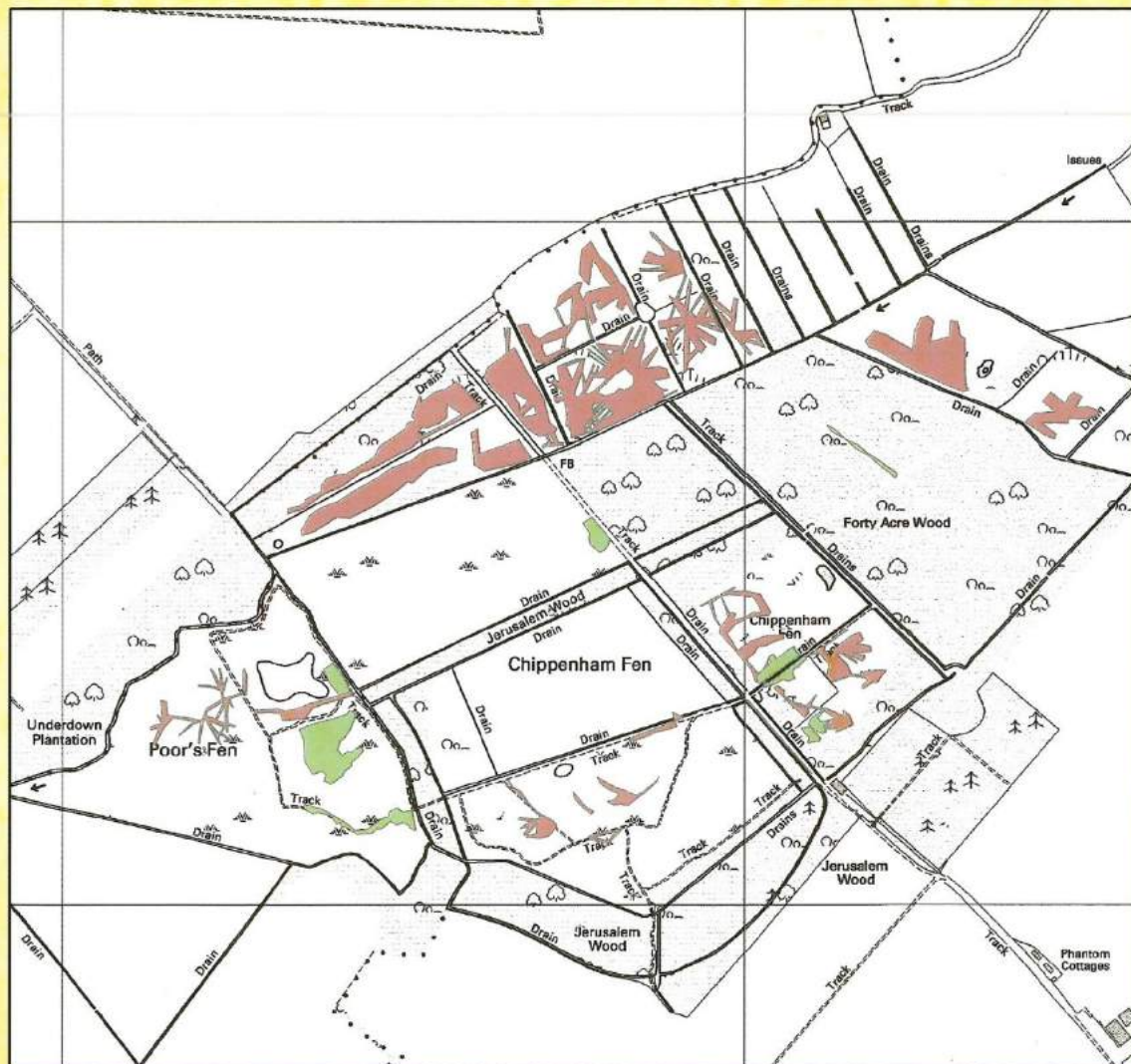


## MAP 3 RIDE CUTTING



**Rides cut/strimmed  
every 2 weeks Apr-end Sept**

**Rides cut/strimmed less frequently; a few  
times during season as necessary**



## Chippenham Fen NNR

### Management 2016-17

- Cut & Raked -1.23ha
- Rytec- 7.21ha

Scale (at A4): 1:8,000

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2011. Ordnance Survey 100022021.

Map produced on DD/MM/2011 by

GI and Analysis Services Team,  
Natural England  
Map Reference:



Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	Total	Index	Weak Index
Mean Temp	16.00	15.00	13.00		18.00	22.00	16.00	18.00	17.00	23.00	19.00	20.00	22.00	23.00	20.00	27.00	20.00	21.00	22.00	25.00	29.00	24.00	23.00	30.00		19.00			
Mean Sun	100.00	100.00	100.00		100.00	95.00	80.00	90.00	80.00	100.00	80.00	50.00	95.00	95.00	40.00	100.00	50.00	60.00	30.00	100.00	100.00	100.00	85.00	100.00		80.00			
Small/Essex Skipper														4	8	13	18	2	4								49	49	49
Large Skipper												3	18	33	40	44	24	3	1								166	166	166
Clouded Yellow																											0	0	0
Brimstone		8	7	10	23	16		12	11	4	4		1	1		9	5	14	7	35	8	8					173	183	183
Large White															3	4	3	1	2		1						14	14	14
Small White										1					2	4	3	7	5		3	13					38	38	38
Green-veined White				1	3	5	6	5	6	1			1	3	25	66	45	32	20	15	7	13	5	4	2		262	265	265
Orange-tip			2	5	6	6	4	3	2	1																	24	29	29
Green Hairstreak																											0	0	0
White-letter Hairstreak																											0	0	0
Small Copper																											0	0	0
Brown Argus																1											1	1	1
Common Blue																				2							2	2	2
Holly Blue						1		2	1	1						1		1			1						8	8	8
Red Admiral								2		2			1				2	1	3	1	2	2	1	1	2	5	23	25	25
Painted Lady																							1				1	1	1
Small Tortoiseshell	1													1						3	4	7					16	16	16
Peacock	13	12	15	16	15	7	4		1							4	21	29	19	9	1						150	166	166
Comma	4	1			3										1	2			1		1	3				4	20	20	20
Speckled Wood				1	2	2	1		2	4	5	2	4	3		1	2	2	3	7	6	11	2			1	59	61	61
Marbled White																				4							4	4	4
Gatekeeper															2	3	22	13	11	5							56	56	56
Meadow Brown											3	6	8	43	20	34	30	18	23	8		4		1	2	1	199	201	201
Ringlet													8	165	177	148	89	31	12	3							633	633	633
Small Heath																											0	0	0
Total	16	21	25	34	52	36	14	24	23	14	12	11	41	255	280	333	268	152	108	88	36	60	12	6	6	11	1898	1938	1938

# CHIPPENHAM BUTTERFLY TRANSECT 2016

