

# **Chippenham Fen NNR**

## **Reserve Report**

**April 2015 - March 2016**

**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 (in particular Phil brown and Annie Osborn).

## Grazing

### Buffalo

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

Pigeon	22 July – 3 September; 9 October – 2 November (67 days)
Baxter west	1 April – 13 April; 2 November – 31 March (163 days).
East meadows	27 May – 22 July; 3 September – 9 October (92 days).
North meadows east	13 April – 27 May (44 days).
North meadows west	Not grazed by buffalo this year

In 2015-16 the winter remained relatively mild throughout but despite this it was again necessary to supplementary feed the animals with barley straw from 23 February until 13 April - as last year the animals were fed at Bullock Hill. Two bales per day were given, and in all 100 bales were given to the animals, compared with 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 47 bags).

We received notification in the Autumn that the buffalo were to be TB tested before mid-January. This caused a certain amount of apprehension for reserve staff, as the buffalo had not been in the pen for about three years. As it turned out, the first vet visit on 14 December went relatively smoothly, apart from KT having difficulty getting his horns through the crush and Samson panicking whilst in the crush. We had fed the animals in the pen for a few days prior to the visit, and this helped getting them in on the day. Fortunately, the second visit on 17 December went equally smoothly, apart from Samson refusing to come anywhere near the pen. The vet was able to check him in the field, and Samson along with all the others was pronounced negative for TB.

Lice infestation was evident during the winter – while the animals were in the pen for the TB test we took the opportunity to treat them all with Trodax. Some of the animals were missing ear-tags, and the vet replaced these during the TB visit also.

No dung samples were taken this year.

The electric fence around the Baxter west grazing compartment was strimmed once over several days in the period 12 August – 25 September; the fence around Pigeon grazing compartment was strimmed once, between 20-27 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.

A number of rotted fence posts were replaced in the Baxter west fence in late October. A number of posts were replaced in the North meadows east fence, along the footpath, on 2 June. The gatepost on the gate into compt 2 was replaced on 11 September.

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 23 February-April when we were feeding the animals.

## **Cattle**

Grazier Roger Beecroft brought 20 Redpoll cows and calves on to compartment 1 on 14 July. The cows were moved from compt 1 to compt 2 on 25 August, and then moved back into compt 1 around 13 September. One cow with breathing difficulties was taken away on 27 September. Four calves were taken away on 6 November. The remaining 15 cows and calves were taken off a few at a time between 19 and 22 November.

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.

## **Rides/ Ride-Cutting (Map 3)**

All main rides were cut regularly from 21 April until 27 October, using the Gator and flail mower or BCS pedestrian mower. Operations were curtailed on 2 October, when the Wessex flail mower appeared to blow a gasket In total 8.5 man-days were spent ride cutting.

Any windblown trees/branches were promptly cleared from rides.

## **Topping/Cut and gather (Map 4)**

6 man-days were spent cutting selected areas in compartments 1, 2, 9, 11 and 13 using the tractor and Ryetec cut and collect machine between 13 August and 11 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 23 August and 6 September. A block was cut in compt 8 using the BCS on 7 September – this was subsequently raked by NNR staff and volunteers, and most of the material burnt.

The ditch margin on the west side of the footpath between the shed and Baxter ride was cut and raked on 23 September.

Selected areas of very rank vegetation in Poors Fen (compt 4) were cut using the BCS and then raked and piled by staff and volunteers over several days between 28 September and 20 October.

The Ryetec was loaned to the NE Collyweston base between 15 September and early November, and to the NE Suffolk coast reserves between 10 December and 29 January.

## **Sedge Cutting (Map 4)**

Marcus Setchell carried out the sedge cutting this year, in compartment 4 between 28 August and 23 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, but some of the visits had to be cancelled due to an Achilles injury.

Some willows were cut back on Baxter east and on the main bogbean site between mid-February and early March.

## **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 rain gauge enclosure in compartment 2 was strimmed and raked in November.

Andy Copsey of Capel Manor College brought 8-10 students to the reserve on 3 occasions (8 May, 1 October and 29 February) to carry out some basic water quality testing.

## **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.

## **Deer/Pest control**

No cull information was available at the time of writing.

## **NNR Workbase**

On 2 April, Ruth Angrave and Phil Brown noticed a couple of slightly suspicious characters on the footpath through the reserve. When Ruth came to feed the buffalo the following day (Good Friday), she discovered that the workbase had been broken into. As well as interfering with the electricity transformer at the side of the building, the thieves had gained access to the building by smashing the fire doors at the rear. Once inside they had accessed the office by forcing the door, doing a lot of damage in the process. Strangely, very little was actually taken – a telescope and tripod from the office and possibly a pair of chainsaw trousers. The petty cash and a pair of expensive Leica binoculars were not taken from the office. Police and SOCO attended the scene. We later learnt that the fair had been in Newmarket over Easter, and we assumed that the thieves were in some way associated with the fair. In May, we received a tip-off from Jim Riley. The police had contacted him to say they had intelligence that ‘a big green shed full of machines’ was going to be targeted. Just in case, we moved all our tractors, machines and power tools off site between 19-21 May – some were stored at Brettenham, the tractors at Longwood Farm and smaller items at the VLA in Bury. As it transpired, the tip-off was a false alarm. UK Power came to repair the transformer on 8 April.

HG Frost replaced the damaged doors on 10 June, and Aztec fitted an alarm to the building on 24-25 June. The alarm is set up to alert Jim Riley and SRM Chris Hainsworth by mobile phone in the event of a break-in. There were a few teething problems with the alarm, which went off at night twice in the space of a week in August – Chris attended both times, but there was no evidence of a break-in attempt. It is possible that a bat or other small mammal had triggered the alarm – Aztec returned to adjust the sensitivity and since then there have been no problems.

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 were serviced by M-Fire on 24 August. NE staff tested the fire alarms on a monthly basis. Fire extinguishers were serviced by M-Fire in early February.

The septic tank was emptied by Redstripe on 12 and 22 May, taking away a total of 4500 gallons of waste. The tank was completely emptied again on 22 March, with another 4500 gallons removed, raising questions as to whether the tank was damaged in some way allowing ground or rain water to enter. Willow Pumps serviced the septic tank pump on 3 July.

Portable electrical appliances were not tested this year.

The two tractors, Gator, Wessex flail mower, Votex flail, rotovator, Ryetec and BCS were serviced by Stephen Eyles on 24 February and 2 March.

LOLER testing was carried out by RSA engineering on 6 July and 15 January.

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.

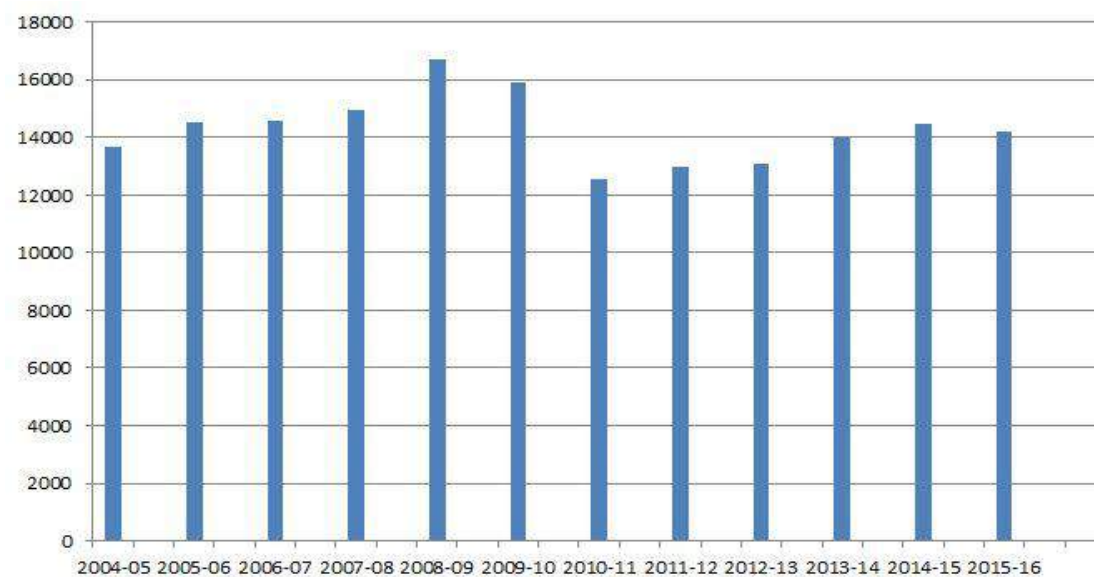
Browns of Burwell delivered diesel to our tank on 13 July.

NNR staff cleared the gutters on 17 June.

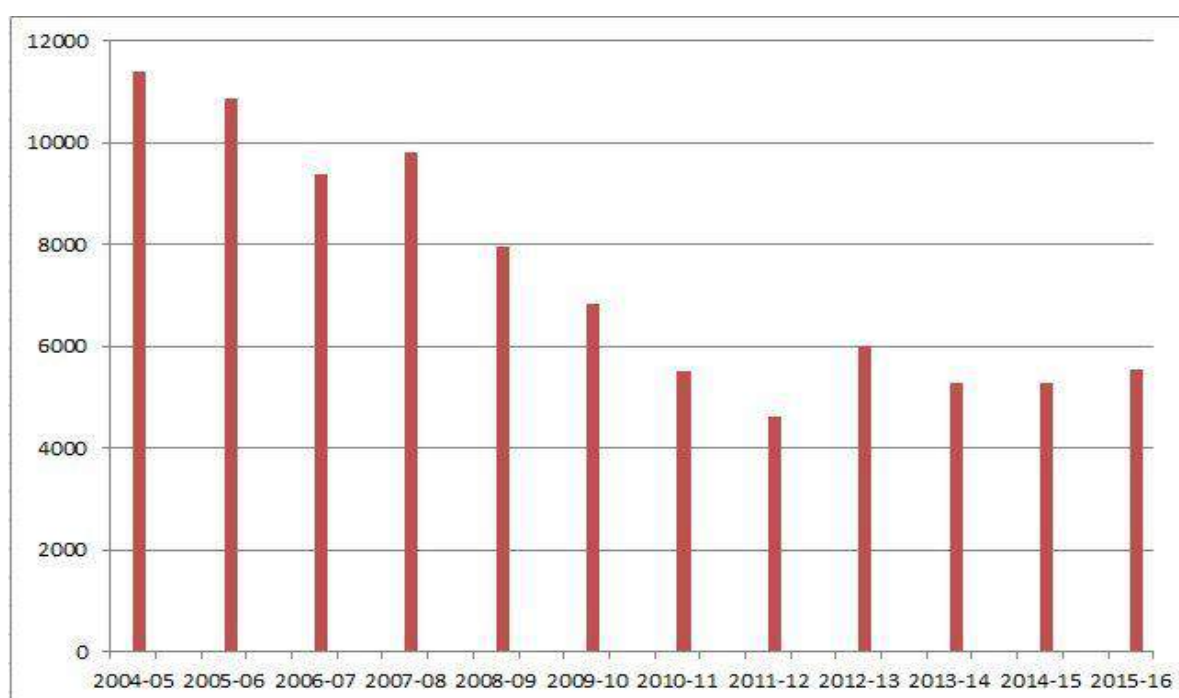
A number of trees were felled at the rear of the shed during October.

A large crab apple tree adjacent to the side of the building blew over in early January, and was cleared on 5 January.

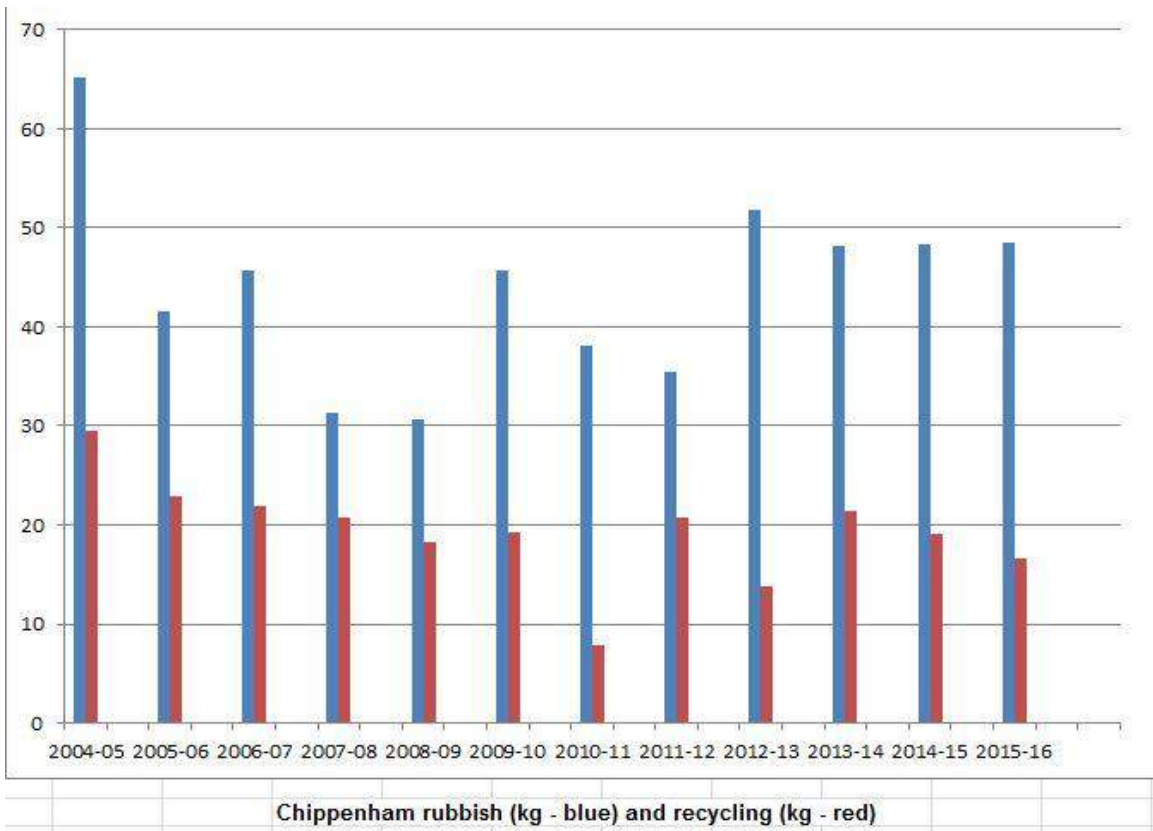
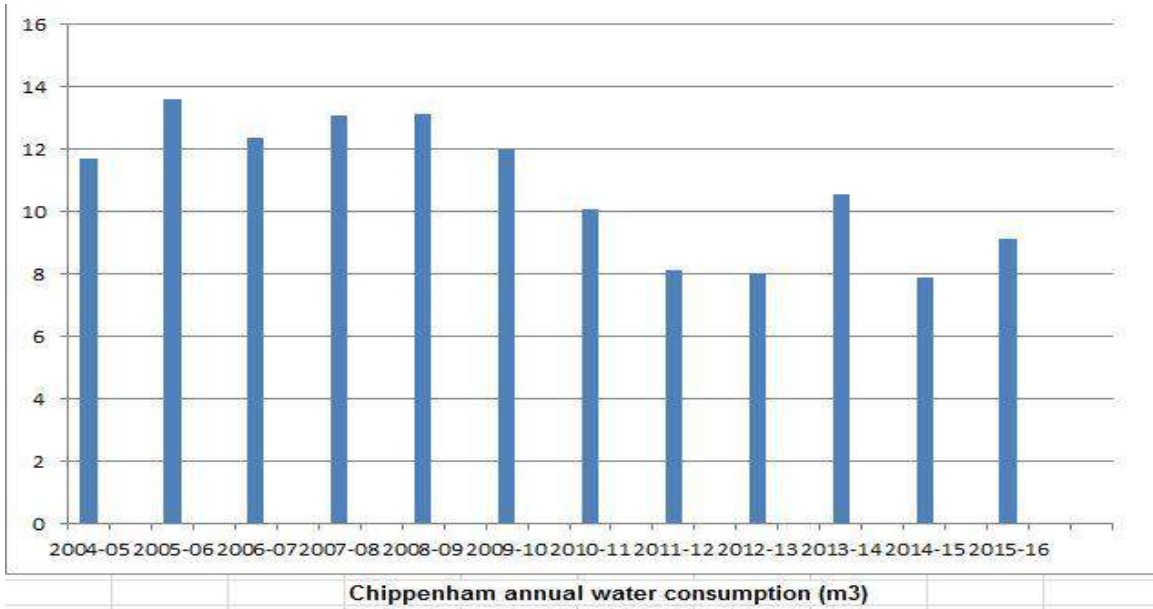
For a number of years we have recorded environmental data for the work base each month, together with vehicle mileage data. Charts showing the annual totals of mileage, electricity consumption, water consumption, cess, rubbish and recycling produced are below:



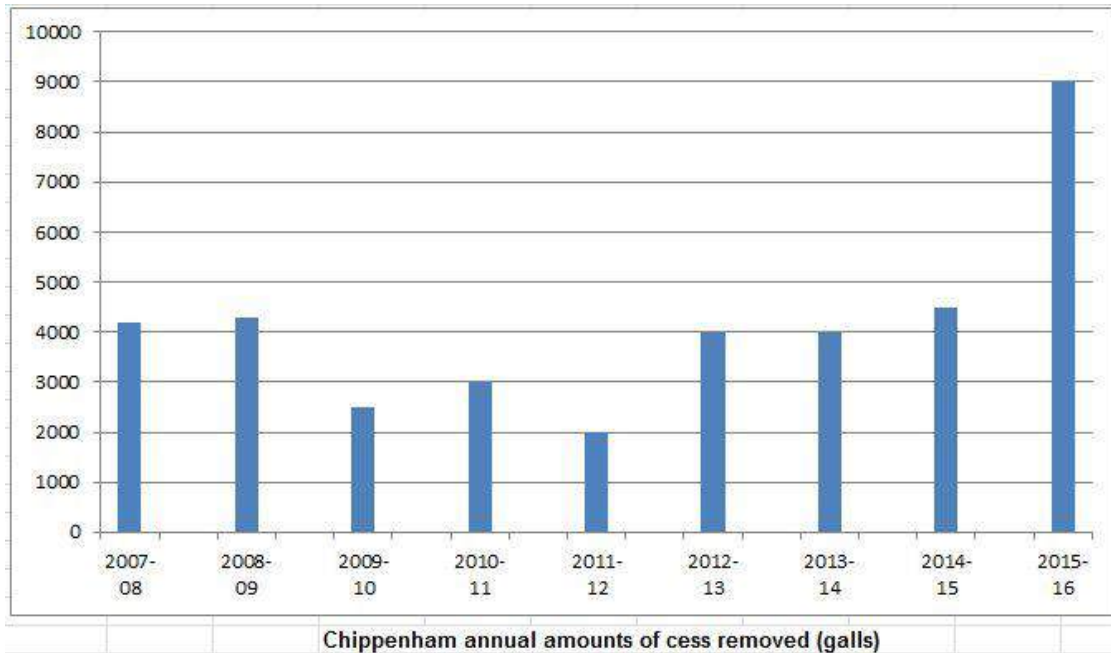
Chippenham annual vehicle mileage



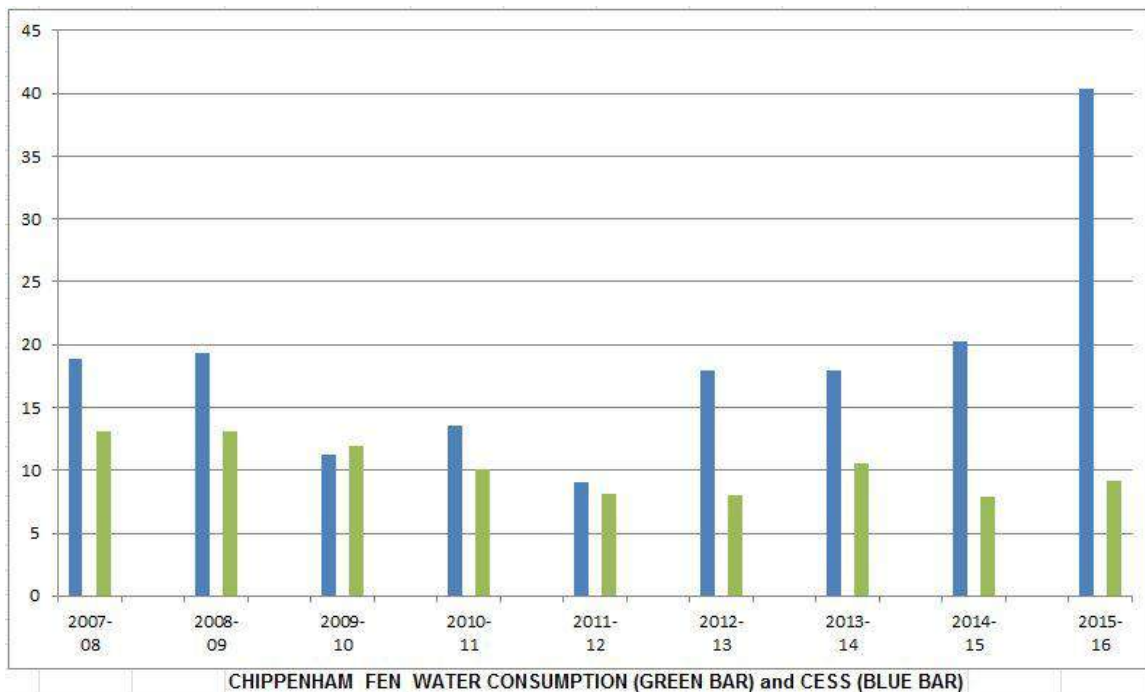
Chippenham annual electricity consumption (kWhr)







Most of the charts are self-explanatory and are reasonably comparable from year to year, apart from the amount of cess, which this year has shown an unusually high spike. The cess and water consumption charts should show a very close relationship, but this is certainly not the case this year, and in fact the two have been diverging for the last four years (see chart below), leading us to think there may be some ingress of rainwater or ground water into the tank.



## Health and safety

Access structure checks were carried out on 23 December and zone 1 tree safety checks were carried out on 18 November.

We hosted an NNR H&S meeting at the workbase on 3 March.

Dersingham SRM Ash Murray carried out a H&S workplace assessment on 15 April.

All the NNR risk assessments were reviewed during the year, and re-written in a new format.

## 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 109 man-days were worked by volunteers, and this can be broken down into 60.5 days of practical management and 48.5 days of survey work.

With thanks to:

Bruce Martin, Phil Brown,

Dusk survey (3.5 days)

Terry and Glen Riley, Nick Sibbett,  
Dale Hing, Alastair Burn.

Cambridge Conservation Volunteers

Spent two days assisting  
with practical management  
works (14 days)

Phil Brown

Breeding bird survey (2.5  
days)

Terry and Helen Moore

Amphibian and orchid  
surveys (15 Days)

Annie Osborn, Phil Brown  
Dale Hing, Kate Fagan  
Sonja Kaup, Monica O'Donnell  
Alex Nichols, Ruth Angrave  
Bill Mansfield

Weekend buffalo checks  
(19 days)

Alex Nichols and scouts  
Phil Brown, Annie Osborn  
Sam Mortlock

Practical management  
(27.5 days)

Alan Leslie

Plant recording (3+ days)

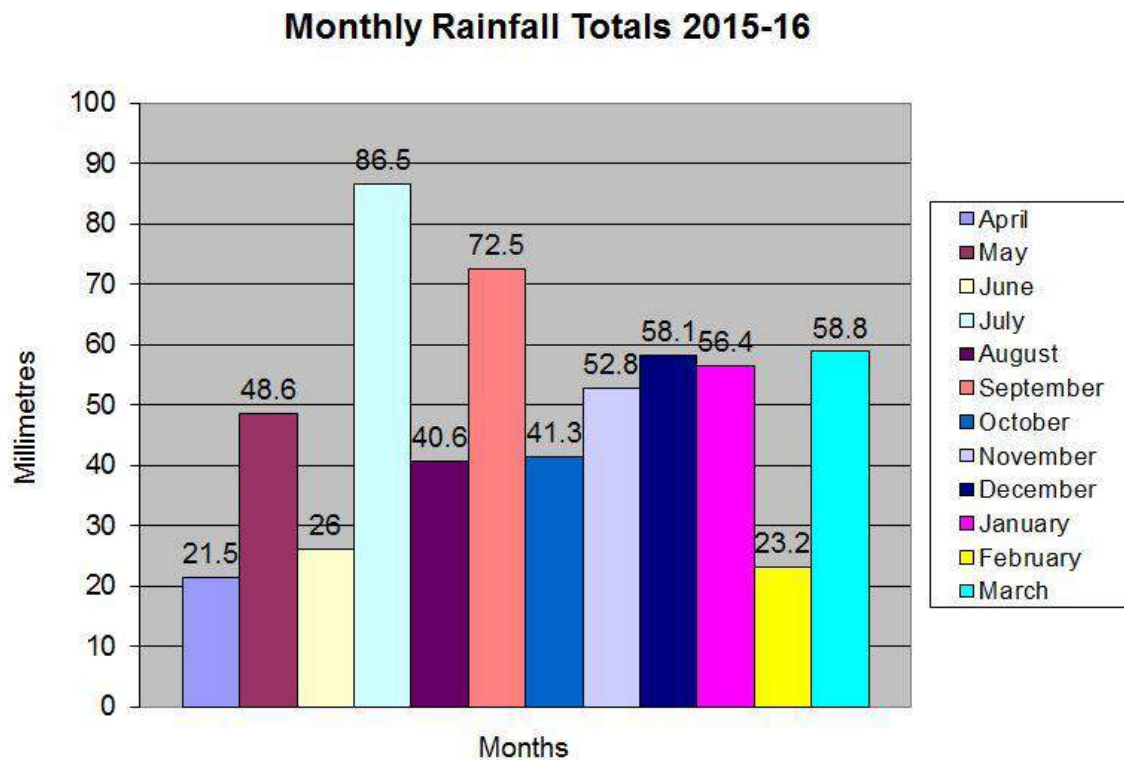
Mike Holdsworth, Peter Bircham et al

Bird ringing (24.5 days)

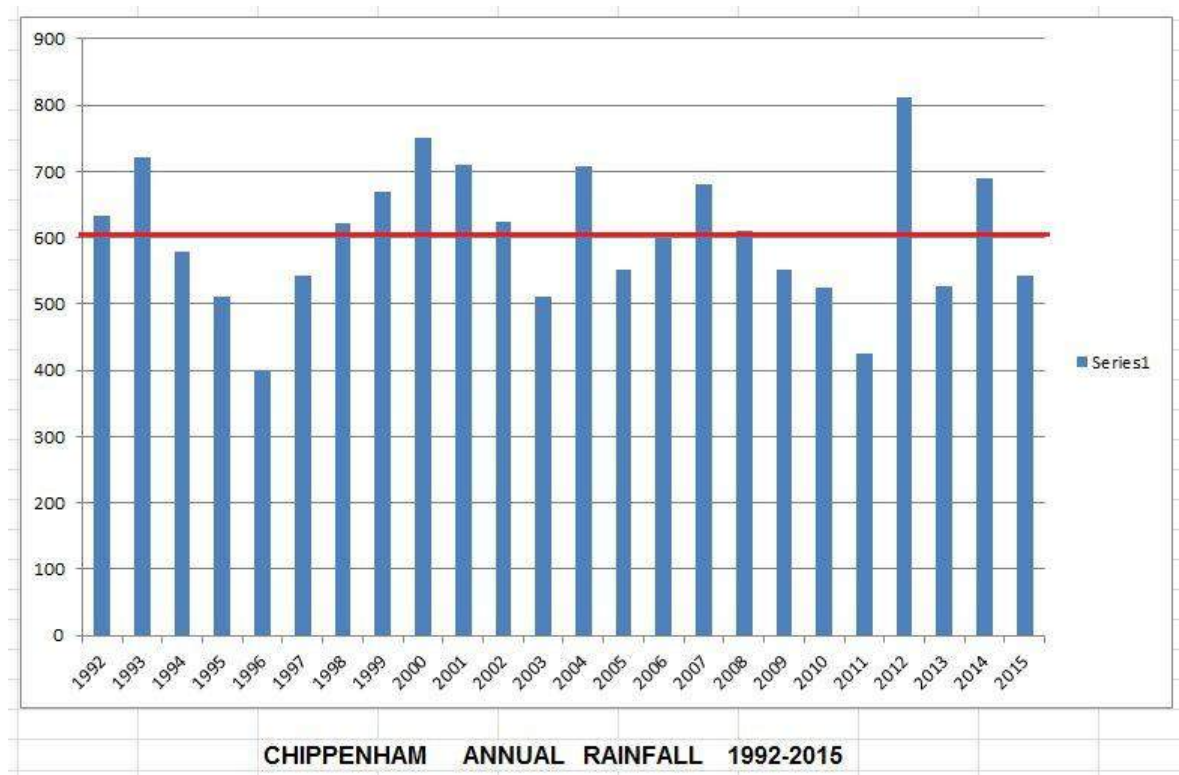
## Survey and Monitoring

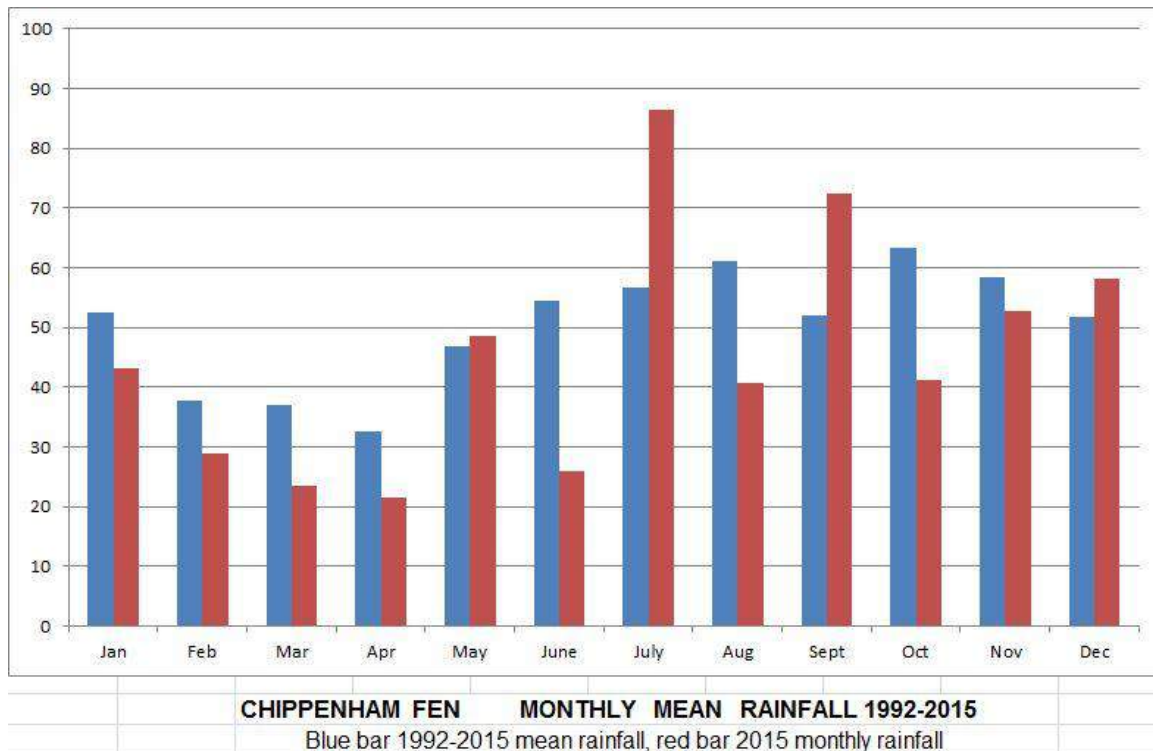
### Water levels/Rainfall

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



Rainfall in 2015 was somewhat below the long term average (red line in the chart below). January – April were below average, as were June, August and October, while July and September were much wetter than usual.





## Birds

### Woodland CBC

For the fourth year Phil Brown carried out a modified woodland CBC in compartments 3 and 12. However, this year's survey was curtailed due to injury and the later visits abandoned. A draft report of the first two years' results can be found at:

<..\Survey & Monitoring\Birds\Chippenham Bird survey - Brown>

### Woodcock survey

The annual dusk survey was carried out on 19 May. Below is a short report of the evening:

#### Chippenham Fen Dusk Woodcock Survey 19 May 2015

After a breezy day of sunshine and heavy showers we were apprehensive about the prospects for the annual woodcock survey, especially when a hail shower thundered down shortly before we set out for our allocated positions. Fortunately it was fine – the wind dropped and it was a very pleasant evening weather-wise, though dropping quite chilly after dark.

This year it was decided to record 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.

### 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	1	3
2030-31 hrs	3	5
2040-41 hrs	4	5
2050-51 hrs	1	2
2100-01 hrs	2	3
2110-11 hrs	3	3
2120-21 hrs	4	7
2130-31 hrs	1	2

As can be seen, from the mapping of roding flights the maximum number of definitely different birds recorded in any one minute period was 4 – the same number as last year. However, it is possible that up to 7 different birds were roding during the 2120-21 period.

### 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

Point	Observer	Single bird contacts	Two birds together contacts	Three birds together contacts	Total recorded contacts
1	Mike	26	1		28
2	Terry & Glen	14	1		16
3	Alastair	41	8	1	60
4	Bruce	15	2		19
5					
6	Dale	18	3		24
7	Chris	17	4		25
8	Ruth	14	1		16
9	Nick & Katie	11	1		13

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 60 contacts recorded by Alastair at point 3 represents 20+ individual birds, but it does seem that the number of individual birds recorded at each one of the points was at least 5, and at four of the points the number of individual birds involved was probably more than 7.

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

Time period	Woodcock contacts
2020-2024 hrs	6
2025-2029	9
2030-2034	19
2035-2039	17
2040-2044	13
2045-2049	15
2050-2054	4
2055-2059	12
2100-2104	16
2105-2109	18
2110-2114	17
2115-2119	12
2120-2124	12
2125-2129	12
2130-2134	7
2135-2139	4

The birds were obviously taking a breather just before 9pm!

#### **Other species recorded**

Teal pair flew over East Meadow  
 Buzzard 1 in North meadows  
 Marsh Harrier Probably 2 pairs, in Poors Fen and compartment5  
 Tawny Owl 2 heard  
 Lapwing Pair with young in East meadows  
 Little Egret One near river  
 Song Thrush 6 singing  
 Reed Warbler 2 singing  
 Sedge Warbler 1 only singing  
 Grasshopper Warbler 2 in Poors Fen  
 Reed Bunting 1

Highlights were the possible breeding of two pairs of Marsh Harriers for the first time in recent years (one pair is usual), Lapwings breeding on the reserve and Little Egret seen (though commonplace at many sites these days still unusual at Chippenham). On the down side the number of Grasshopper Warblers continued a downward trend on the dusk survey in recent years.

Also of particular note was a sighting of an otter by Nick and Katie at point 9, later heard by Ruth, downstream at point 8, noisily passing through a culvert pipe!

Many thanks to all who participated on the night – your help was much appreciated. Apologies to Owen and Monica who were unable to attend on the chosen night. Best wishes for a speedy recovery to Phil, who was unable to attend due to injury.

Mike Taylor  
 20 May 2015

Chris Hainsworth 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**

Mike 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). Mikes report on the 2014 standards sessions together with full results of ringing sessions can be found at:

<..\..\Survey & Monitoring\Birds\Chippenham bird ringing>

### **Amphibians**

Dr Terry Moore and wife Helen continued to look at amphibians on the Fen in 2015. Their 2015 report is reproduced below:

#### **2015 Amphibian Surveys at Chippenham Fen**

**Thursday 2<sup>nd</sup> April 2015**

##### ***a) Pond D in North Meadows (TL 64841 69875)***

We seemed to arrive at a good time of the year.

*State of pond:* Lots of water in the ponds around and pond D probably at maximum depth. Water was clear and apart from some reed, views were unimpaired except by small bits of water vegetation including stonewort (*chara* sp), maretail (*Hippuris vulgaris*) and spiked water milfoil (*Myriophyllum spicatum*). pH = 7.9. Day had been sunny which would have warmed the water nicely but air temperature dropping quite quickly under a clear sky with no wind.

*Frogs:* No adults or late juvenile tadpoles were seen but there was a large amount of frog spawn on the shallow western edge. It was difficult to count but we think that there was 24 plus or minus 6 clumps.

*Toads:* 54 adults separate adults counted, all small and almost certainly males. In addition there were 4 obvious females, probably forerunners of the female arrival, all in amplexus. 2 of these had single males with them but the other 2 were in balls of males and these could only be estimated – probably 15 males, most around one large female.

Total seen approx. 69 males and 4 females. No spawn seen.

*Newts:* None.



***b) Rest of the 2 meadows either side of pond D including ditches plus ditches on our return (path Pigeon Ride ->Baxter East Ride->Main Ride to car) ie parts of 'd-d', 'd-c' and 'd-h' plus 'd-e'***

No amphibians or evidence of them seen.

### **Saturday 4<sup>th</sup> April 2015**

***c) Pond E in East Meadows (TL 65332 69696)***

*State of the Pond* : pH 8.3, water temp. 12.5°C, air temp. 9°C

Stonewort on bottom of part of the pond – first time we have seen it here, possibly because of the high pH. Water level at maximum and all meadow flooded. The pond turbidity was high, restricting our torch penetration. Lots of lesser diving beetles, water boatman and a few whirly-gig beetles were present.

*Frogs*: For the first time we saw frog spawn but probably only 2 clumps. There were no adult frogs seen.

*Toads*: 130 were counted, all but 3 were small and probably males. However the 3 larger ones were not in amplexus so were probably also males.

*Smooth newts*: These have been seen in past years but none this year. However a pH of 8.3 would certainly discourage them.

*Surrounding meadow*: We did wade through the shallow water in the meadow but found no signs of amphibians. The adjacent ditch has only one small accessible area but no amphibians were seen. As we left the meadow we did find one toad on the left of the path in temporary water.

### **Wednesday 15<sup>th</sup> April 2015**

***d) Ponds L (9: Chippenham Fen) and Pond C (North Meadows West)***

1) Ponds L consist of 3 ponds which are very shallow and are prone to drying out.

Moving away from Baxter West Drive these are :-

i) TL 64913 69295, *State of the Pond* : pH 7.7, water temp 20.1 °C

We found 4 very small smooth newts, 1 male and 3 female and a large dytiscus water beetle

ii) TL 64896 69332, *State of the Pond* : pH 7.8, water temp 19.3°C

This is a slightly deeper pond. We spotted no newts but 12 small fish which looked like sticklebacks.

iii) TL 64857 69341, *State of the Pond* : pH 8.2, water temp 19.3°C

The slightly higher pH probably a little high for newts and we did not spot any despite there being a larger expanse of open water.

These ponds were surveyed whilst there was some light (accompanied by woodcocks) so that we could safely walk on the pitted ground but it was dark by the time we finished them, so we did not attempt to go further down Baxter West Drive but instead moved down the Main Ride. We did hear a frog croaking apparently from the ditch on the left of the Main Ride about 50 m after leaving the car park but these ditches are deep so probably a first year exercising it's voice. No other ditches down the Main Ride yielded any apparent evidence of amphibians.

2) Pond C is a widened ditch with a bridge with now, a lot of reed stems but we found no evidence of amphibians although the vegetation made it difficult to see much.

### **Thursday 16<sup>th</sup> April 2015**

#### ***e) Ponds G, I, A, J and B***

*i) Pond G which is a broadening of a ditch, the ditch runs approx from TL 64992 69263 to TL 64975 69231 : State of the pond : pH7.5, water temp 18.5°C*

This pond was surveyed in the light as the sun was setting as the terrain was somewhat dangerous, No evidence of amphibia were seen although part of the ditch was covered with a surface film and there was a lot of reed making much inaccessible.

*ii) Pond A (TL 64344 69318) No temp or pH taken as we did not completely reach the water.*

We continued down Baxter West Ride and tried to get access to the mere. In this we were partly successful by following a deer path. However this was a small proportion of the mere and no evidence of amphibians were found. By now the sun had set and the dark seemed to stimulate the

Woodcock to fly over as they had all the other nights.

Pond J was a flooded area and does not seem to exist any more

*iii) Ponds (?) I are shallow vegetated depressions*

We looked in all the shallow water around the Bog Bean area and did find one male smooth newt at TL 64486 69134. There is one deeper depression close to the gate and ditch and this had sticklebacks and Chara sp. The pH was 7.4, water temp 15.6°C.

We walked back via pond B which is inaccessible because of reed growth but heard a toad. No ditches we looked at on our way back through North Meadows and along the main ride gave us any reason to suspect amphibians were present.

We have not looked at the frog spawn which you found but it obviously should be part of this report

#### **Point of Interest**

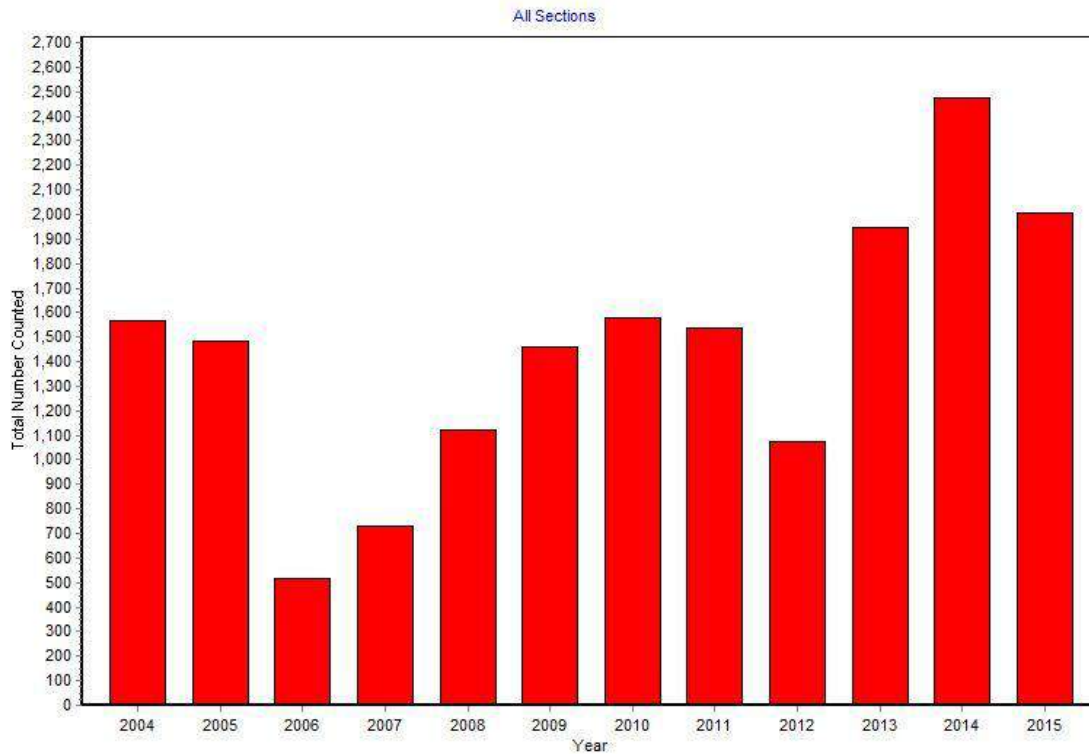
We have come across other people doing toad counts elsewhere that have found lots of males with none or a few females only and last week we were staying with Professor Trevor Beebee and from his research he suggested that as the males come early, they got some warmer nights but the later females have been faced with very cold nights for a bit and have delayed their appearance.

#### **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.

Despite more variable weather through the summer, 2015 was still a reasonable year, as shown on the chart below. The transect on 16 July was particularly noteworthy, with a huge total of 420 butterflies recorded by Ruth Angrave. A marbled white was seen on this transect, in the north meadows – possibly a wandering individual from the closest known colony on Devils Dyke.

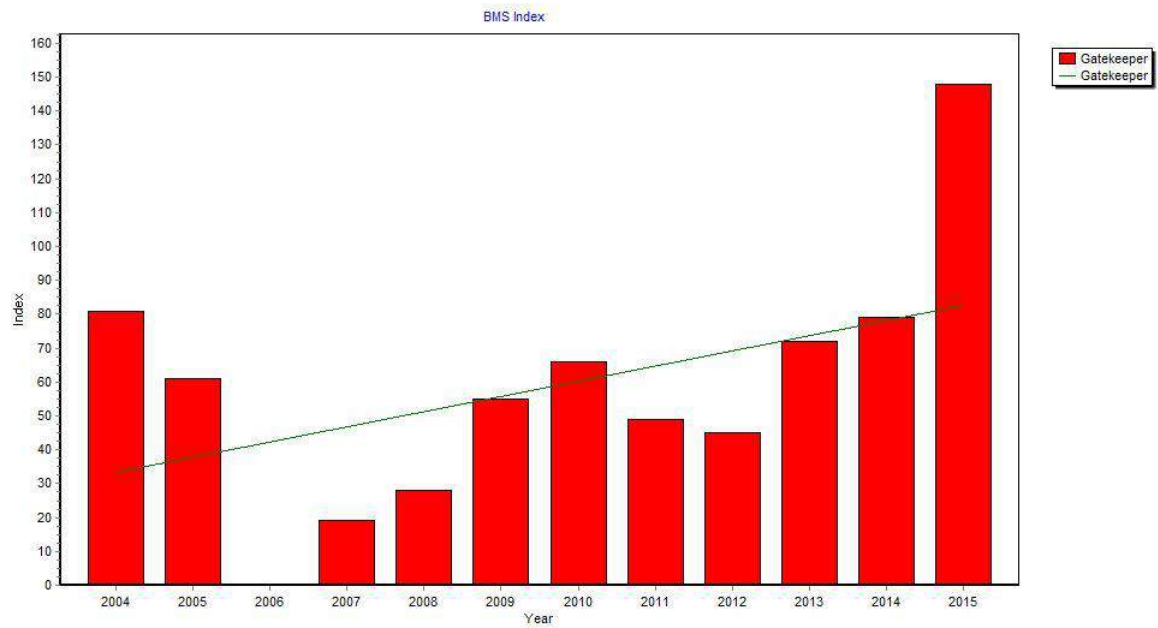
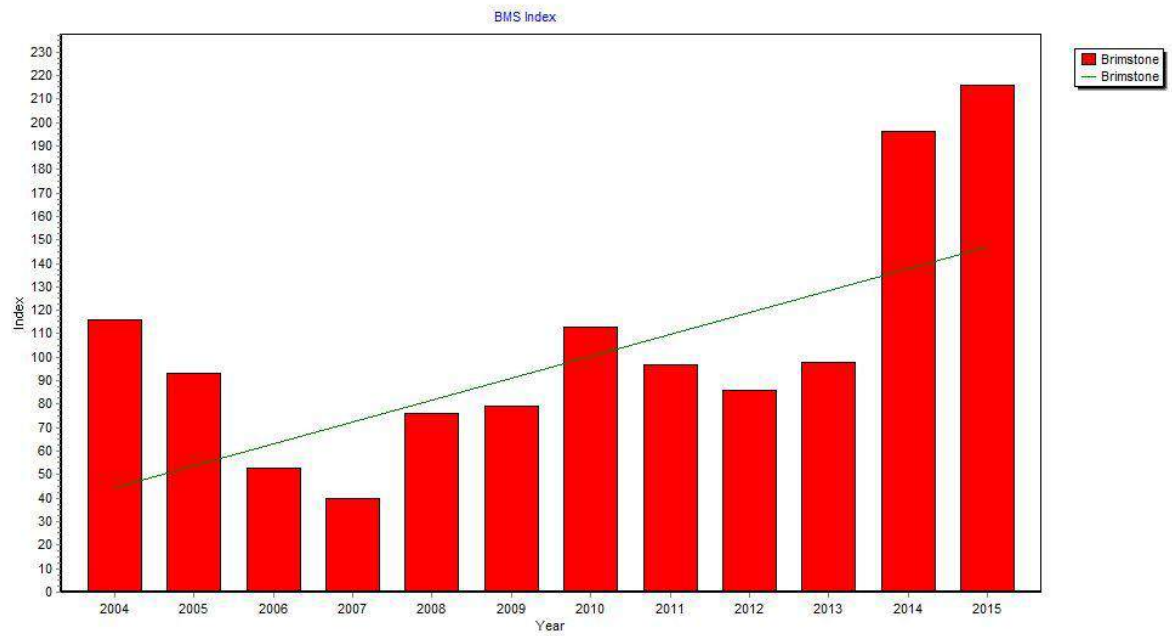


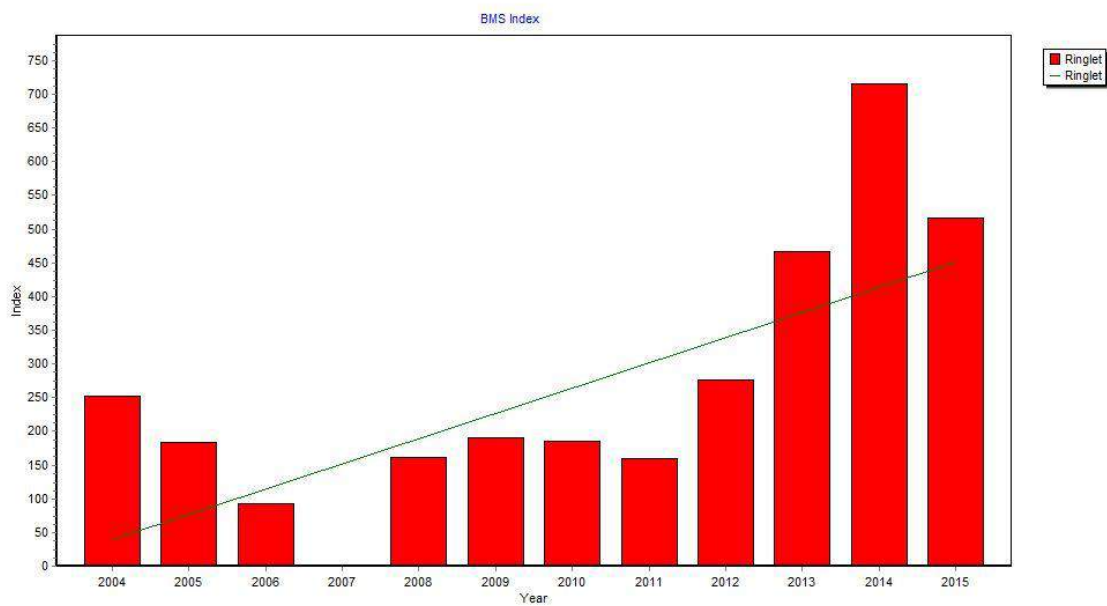
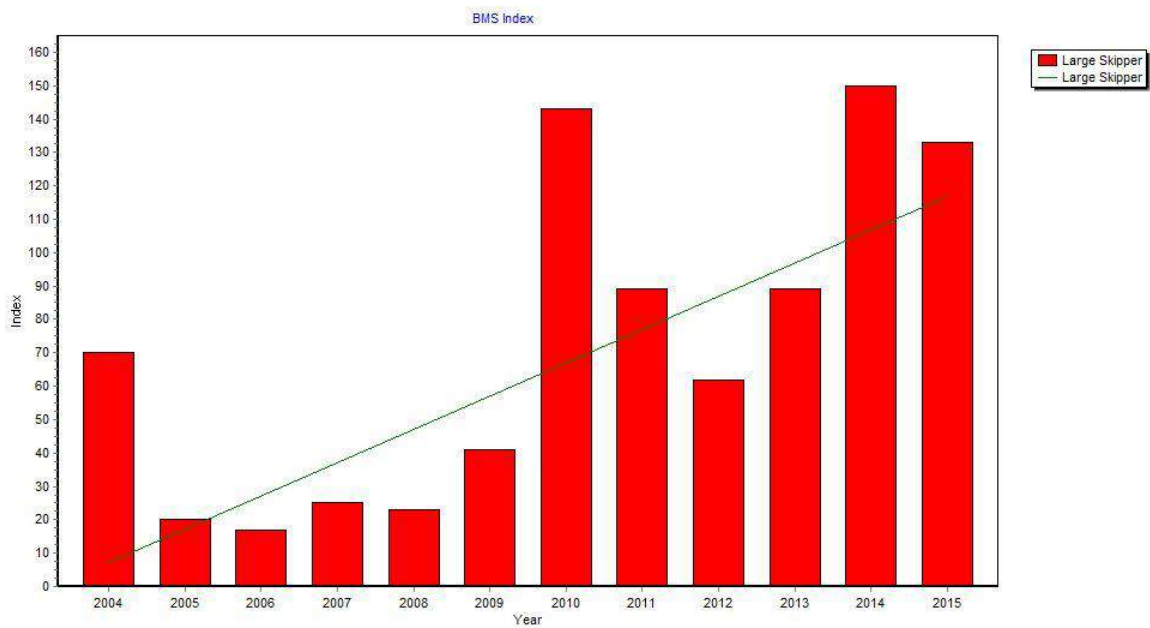
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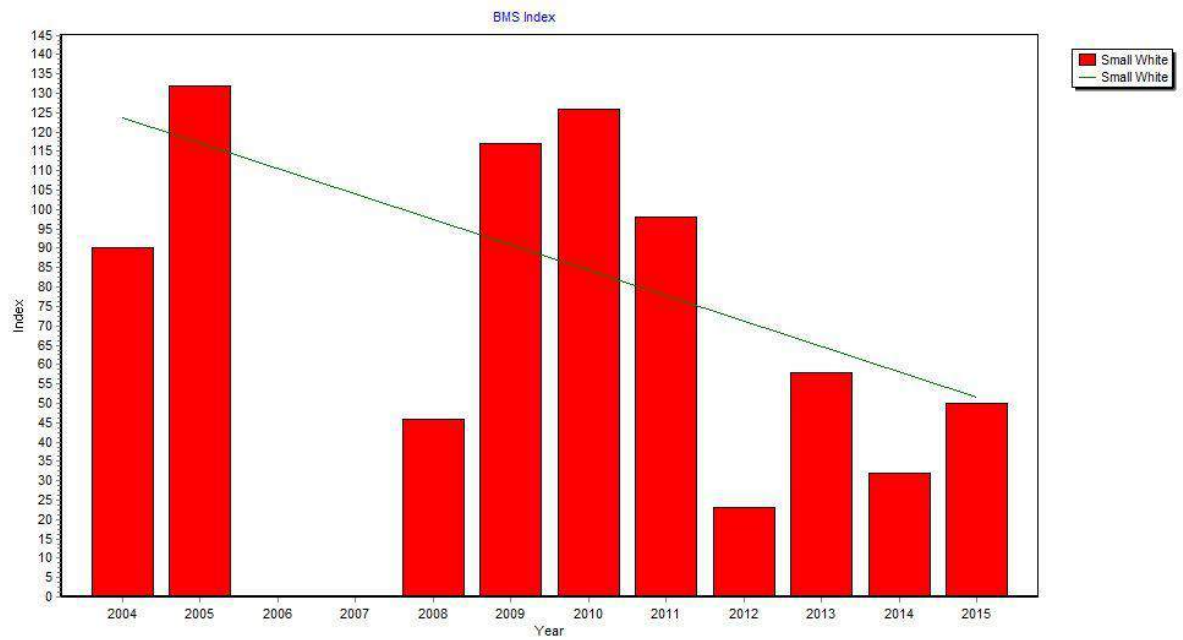
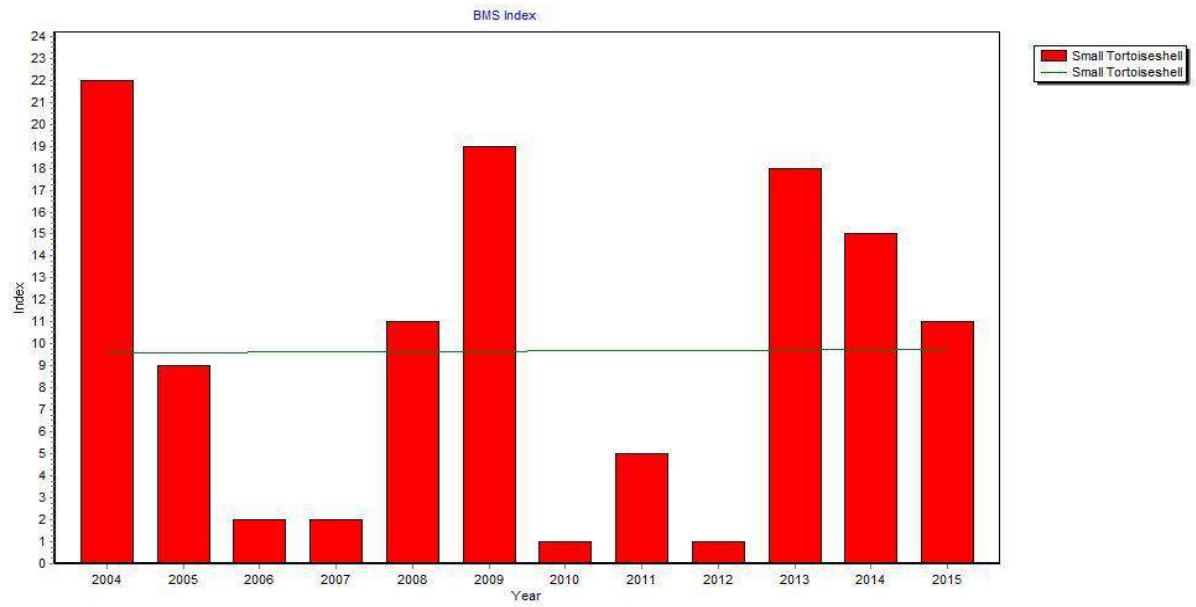
### Chippenham Fen Butterfly transect–total butterflies recorded

Overall, eleven species are showing an upward trend in numbers, and a further five species appear stable. Only four species exhibit a possible decline; small white, green hairstreak, small copper and holly blue.

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

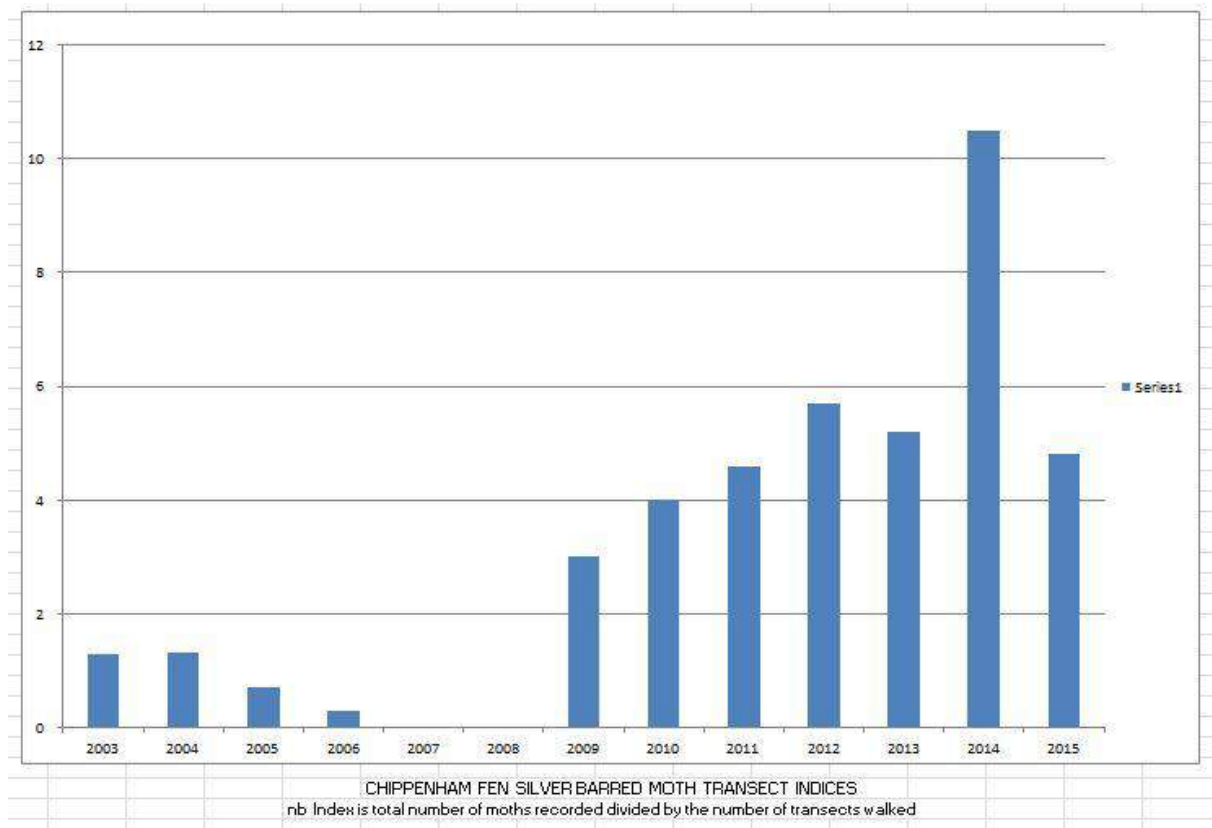






## Moths

The first silver barred moth was seen on 22 May. There was a marked decline in numbers this year, particularly compared to the record breaking year of 2014. The reason for this is not clear – possibly it might be due to a natural cycle of abundance, but there may have been an effect from the Lodes Granta trial in late 2014. This led to compartments 8 and 11 being temporarily flooded, and subsequently staying much wetter than usual for an extended period, even up until 2016. This may have had an impact on the survival of moth larvae or pupae.



### 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.

There were no light trapping sessions carried out this year.

## Plants

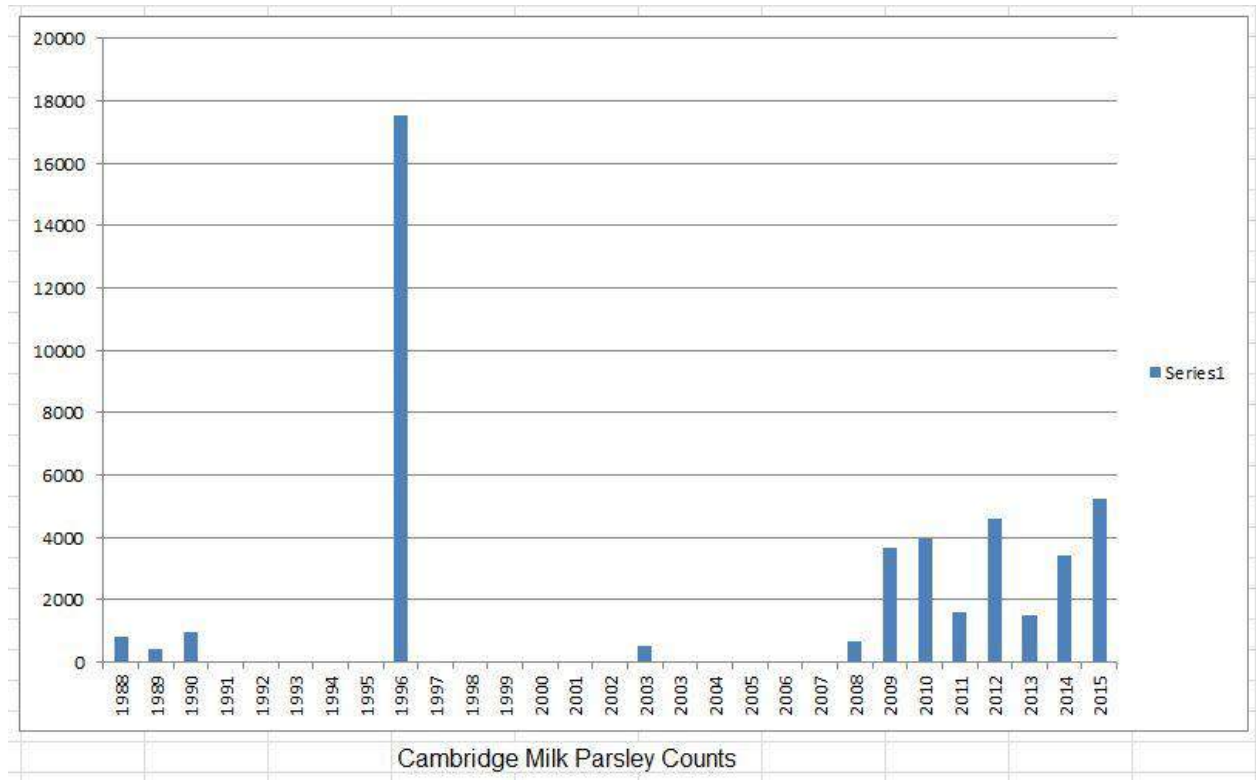
### Cambridge milk parsley

NNR staff carried out the annual survey between 4-6 August. Only flowering plants were counted, and this year numbers were slightly up with 5243 recorded.

A spreadsheet of the annual counts can be found at:

<..\..\Survey & Monitoring\Plants>

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



### **M13 monitoring**

Sue Shaw and Ros Tratt came to the reserve to monitor quadrats in M13 areas on 30 June.

Reports of previous years monitoring can be found at:

<..\..\Survey & Monitoring\Plants\Shaw M13 reports>

### **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.



## Orchid survey

NNR volunteers Terry and Helen Moore spent some time studying orchids on the reserve. 2015 was generally quite a reasonable year for marsh orchids, with Over 4000 being counted. 15 bee orchids were recorded in compartment 1 on 23 June. There were 13 fragrant orchids on Baxter east on 15 July, together with 43 fragrant orchids at the eastern end of compartment 2. Only 1 marsh helleborine was seen found, near the 'bridge to nowhere' in compartment 2. 15 twayblade were recorded in East meadow on 27 May.

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

[..\..\Survey & Monitoring\Plants](#)

## Bogbean

The peak bogbean count at the main site in compartment 4 was 293 on 13 May.

## 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) for the third year, using the BTO breeding bird methodology, and the required two visits were made on 23 April and 31 May. Below are summarised the totals for the early and late visits over the last three years:

Early Visit	20/04/2013	22/04/2014	23/04/2015
Blackbird	8	9	8
Blackcap	7	5	11
Blue Tit	17	12	19
Buzzard	2	1	1
Canada Goose		12	3
Carrion crow	2	3	6

Chaffinch	4	4	6
Chiffchaff	12	12	16
Coal Tit	3	1	3
Cuckoo			1
Goldcrest	1	1	1
Grasshopper			
Warbler	4	1	4
Great spotted woodpecker	6	3	2
Great Tit	9	11	16
Green Woodpecker	6	4	6
Grey Heron	1		
Greylag	2	4	7
Jackdaw	11	2	16
Jay			3
Lapwing			1
Long tailed Tit			4
Magpie	1		1
Mallard	2	1	2
Marsh Harrier			1
Marsh Tit		1	1
Mistle Thrush	1	1	
Moorhen	2	2	2
Nuthatch	5	1	1
Pheasant	3	7	11
Reed Bunting	8	10	7
Reed Warbler		3	4
Robin	12	16	15
Rook	7		1
Sedge Warbler	8	14	11
Skylark	2	1	2
Snipe	1		
Song Thrush	1	2	5
Stock Dove	3	2	2
Treecreeper	6	2	3
Water			
Rail	2		2
Willow Warbler		1	
Woodpigeon	32	19	33
Wren	34	39	51
Yellowhammer		1	

Late  
Visit

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

Song Thrush	5	2	3
Stock Dove	3	1	2
Treecreeper		3	1
Water			
Rail	1	2	
Whitethroat			1
Willow Warbler	2		
Woodpigeon	31	25	23
Wren	26	36	39
Yellowhammer			

Initially we were anticipating a weather station being installed on site, but due to the proximity of other stations in the area, and in order to reduce project costs, Chippenham will not now be having one. We will, however, monitor air pollution here, and although anticipated to begin in 2014 there has been no progress on this yet.

### **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. On 27 March 2015, Ruth Angrave found a mature female when sieving a litter pile in a similar location to where the species was re-discovered by Ian Dawson in 2010. This identification was confirmed by Ian Dawson on 1 April.

## Miscellaneous species records

### Butterflies

The first butterfly of 2015 was brimstone, on 6 March. The latest recorded butterflies of 2015 were 2 red admirals on 26 November and a brimstone on 1 December. The first butterflies of 2016 were brimstone and small tortoiseshell on 13 March.

### Odonata

The first large red damselfly of the year was recorded on 21 April, with the first broad bodied chaser on 11 May. Several hairy dragonflies were seen around the reserve in May. The last dragonfly of the year was a common darter on 18 November.

### Mammals

Ruth Angrave borrowed a bat detector from the Norfolk Bat Project and put it out on the fen over several nights in July. The results are summarised below:

#### TL6569

Summary: the numbers relate to the number of bat passes rather than necessarily the number of bats.

Bat species = where there is insufficient information to assign the recording to a species or bat family—normally where there is too much noise to pull out a reliable signal or limited acoustic information.

*Pipistrelle* species = this is where the recording belongs to the genus *Pipistrellus*, but species identification is not possible.

*Myotis* species = this is where the recording belongs to the genus *Myotis*, which in Norfolk includes Natterer's, Daubenton's, Whiskered and Brandt's.

#### 10 July

4 Barbastelle  
1 Bat species  
2 Brown long-eared bat  
13 Common pipistrelle  
2 Daubenton's  
11 Leisler's  
1 *Myotis* species  
4 Natterer's  
61 Noctule  
4 Noctule Serotine or Leisler's  
33 Soprano pipistrelle

**11 July**

2 Bat species  
2 Brown long-eared bat  
48 Common pipistrelle  
8 Leisler's  
1 *Myotis* species  
2 Noctule  
5 Noctule Serotine or Leisler's  
28 Soprano pipistrelle

**12 July**

1 Barbastelle  
1 Bat species  
375 Common pipistrelle  
2 *Myotis* species  
1 Natterer's  
1 Noctule  
5 Pipistrelle species  
112 Soprano pipistrelle

**TL6469**

Summary: the numbers relate to the number of bat passes rather than necessarily the number of bats.

Bat species = where there is insufficient information to assign the recording to a species or bat family—normally where there is too much noise to pull out a reliable signal or limited acoustic information.

*Pipistrelle* species = this is where the recording belongs to the genus *Pipistrellus*, but species identification is not possible.

*Myotis* species = this is where the recording belongs to the genus *Myotis*, which in Norfolk includes Natterer's, Daubenton's, Whiskered and Brandt's.

**16 July**

1 Brown long-eared bat  
1 Common pipistrelle  
1 Daubenton's  
3 Leisler's  
4 Noctule  
4 Noctule Serotine or Leisler's  
90 Soprano pipistrelle

**17 July**

2 Bat species  
10 Common pipistrelle  
2 Daubenton's  
8 *Myotis* species  
1 Natterer's  
2 Noctule  
17 Soprano pipistrelle

**18 July**

2 Brown long-eared bat  
2 Common pipistrelle  
2 Leisler's  
4 Natterer's  
5 Noctule  
2 Noctule Serotine or Leisler's  
1 Pipistrelle species  
2 Serotine  
10 Soprano pipistrelle

**19 July**

1 Bat species  
3 Common pipistrelle  
3 Natterer's  
1 Noctule  
2 Serotine  
4 Soprano pipistrelle

**Birds**

Bird records are given as an appendix to this report.

**Visitors/Meetings**

MT and Ruth Angrave led a guided walk for 15 National Trust Wicken staff and volunteers on 22 April.

CH and RA met Lynda Foster of NE to talk about public engagement on 15 May.

Tom Bolderstone from Dersingham visited on 2 June to look into the feasibility of using the softtrack on the Fen.

CH and Phil Brown met Jon Webb on 15 June to look at woodland management proposals.

Alex Nichols brought a small party of local scouts to the reserve on 16 June to carry out some management tasks.

CH met Rod Pass and Nigel Russel on 3 July to look at woodland management.

Ruth Angrave gave Robert Hawkes and assistant Helen some coaching on pitfall trap sorting on 8 July.

Environment Agency staff came to look at Lodes Granta scheme on 17 July.

Sarah Dawkins, Alistair Helliwell and others used the office for a meeting on 18 August.

CH met James from Kingfisher Bridge and Richard Humpidge of RSPB to look at buffalo grazing on 23 September.

CH met legend David Streeter on an informal visit to the fen on 24 September.

RA met two new three month NNR trainees on 6 October.

EA/Met Office carried out a routine rain gauge check on 3 November.

Sarah Dawkins (N&S team leader) visited on 26 November.

New Woodwalton SRM Pippa visited on 4 December.

CH, MT, RA had liaison meeting with Robert Hawkes, Dave Rogers and Emma Cuthbertson of the RSPB on 8 December.

CH, MT and RA met Phil Ricketts of CPERC to talk about digitising species records on 26 February.

CH met prospective grazier John Taylor on 2 March.

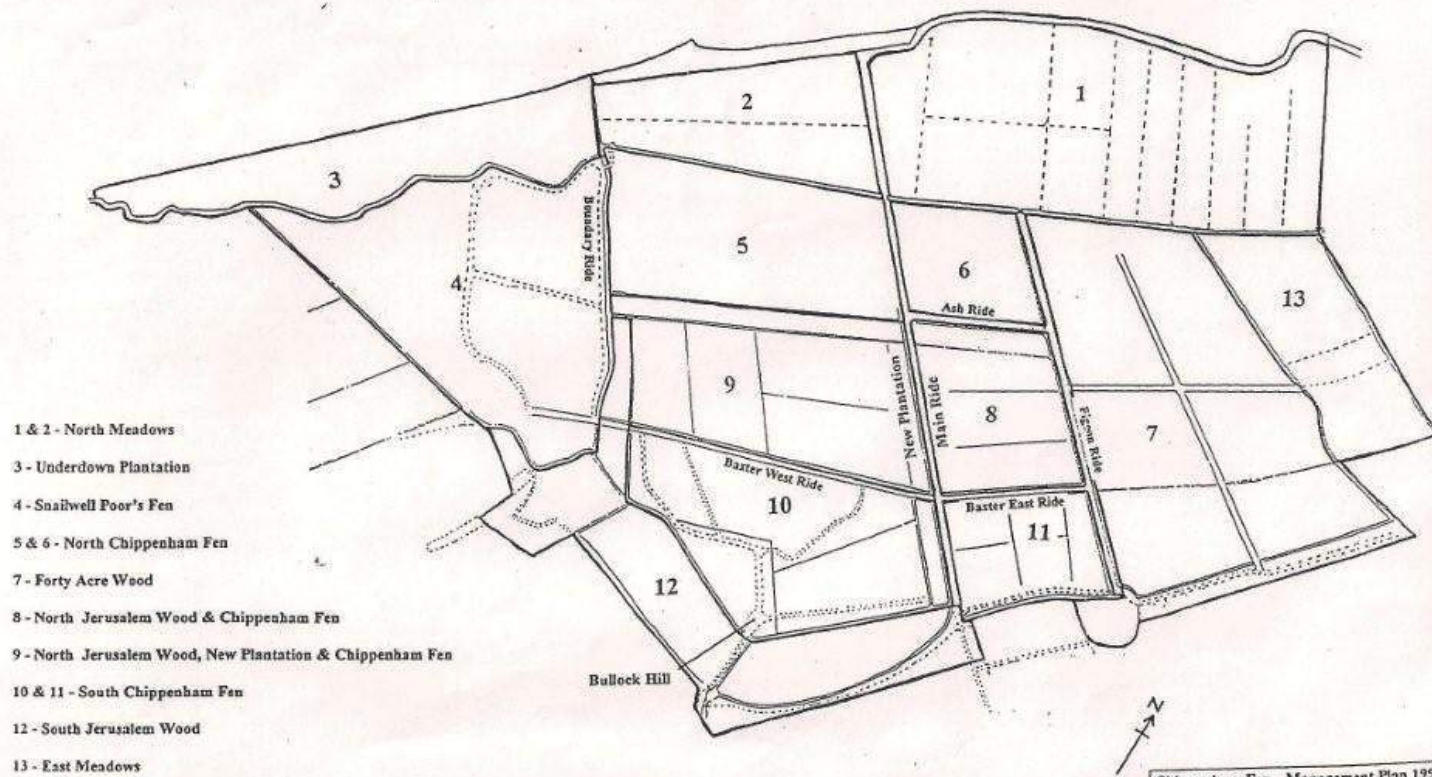
## **HLF trainee project**

During the year trainee Ruth Angrave continued to work towards her NVQ qualification, completing before the end of the year, as well as playing a full part in all aspects of NNR management. CH and MT both completed assessor training, which involved two trips to Lullington Heath to assess trainees on tasks. Emma Bogaard and then Chris Campling of Warwickshire College made several visits to the Fen during the year. Caroline Cavill also visited on occasion, principally to meet RA.

**Michael Taylor**  
Reserve Manager  
April 2016



## MAP 1 COMPARTMENTS

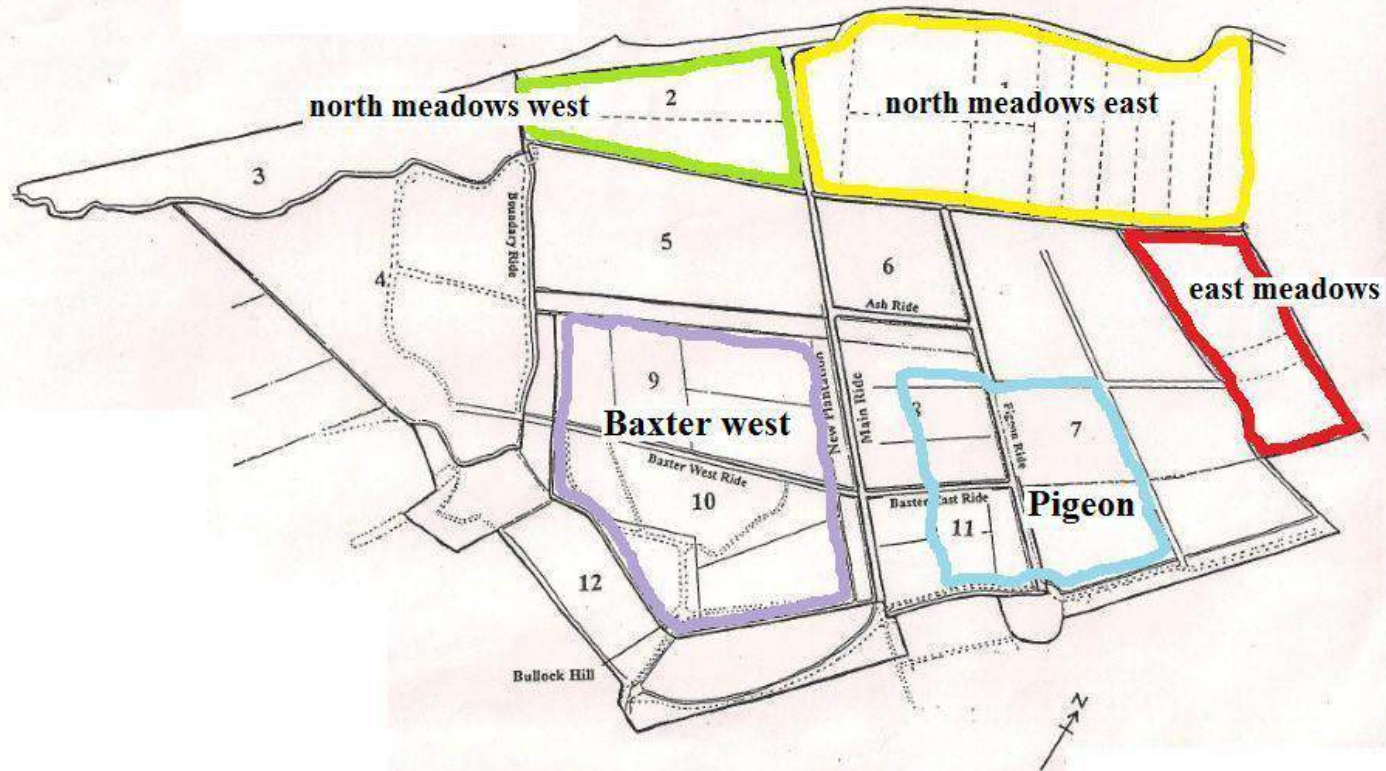


Chippenham Fen - Management Plan 1996

Figure 3 - Compartment Map

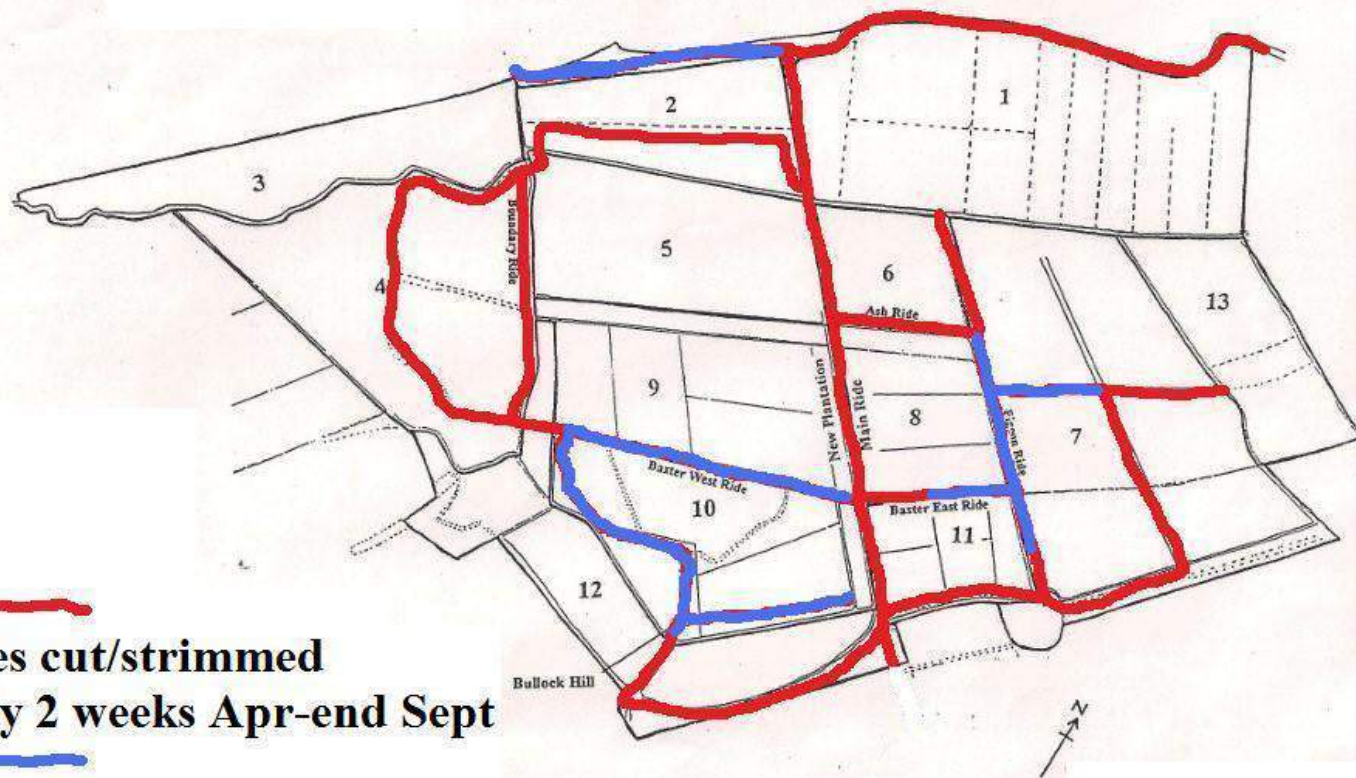
East Midlands Environmental Consultants  
110 Smeinton Dale, Nottingham, NG3 7DN

## MAP 2 GRAZING AREAS





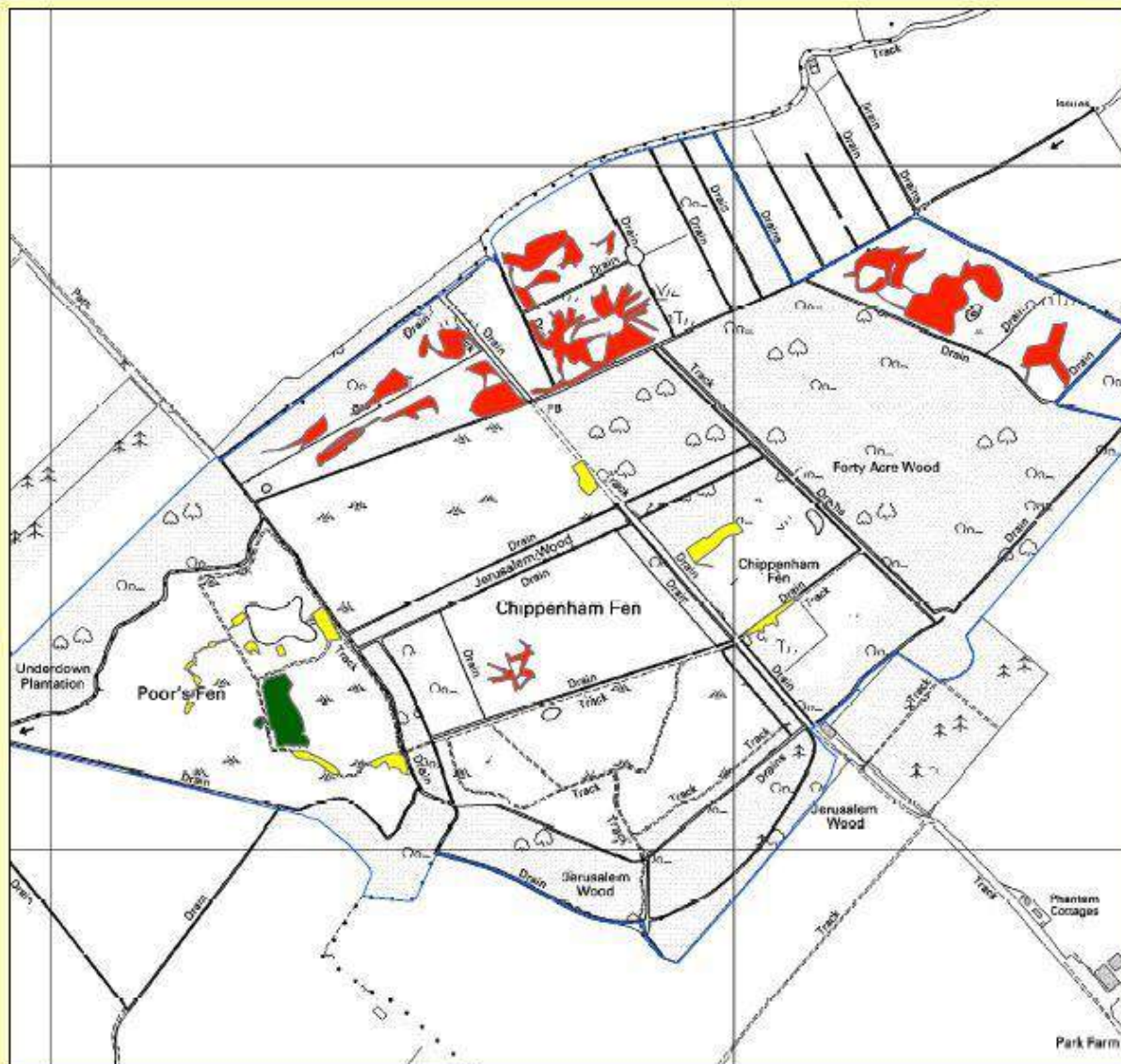
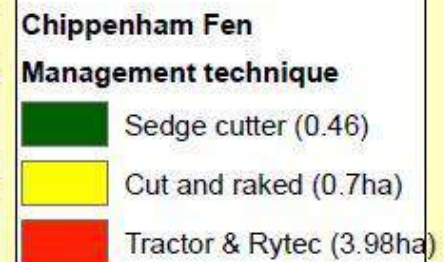
## MAP 3 RIDE CUTTING



Red line  
Rides cut/strimmed  
every 2 weeks Apr-end Sept

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

# Chippenham Fen NNR Management Work 2015-2016



Scale (at A4): 1:8,000

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2011. Ordnance Survey 100022021.

Map produced on DO/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	13.00	16.00	21.00	16.00			16.00	17.00	17.00	21.00	22.00	18.00	22.00	32.00	24.00	23.00	19.00	18.00	23.00	19.00	20.00	19.00		20.00	15.00	16.00				
Mean Sun	100.00	100.00	47.00	100.00			90.00	75.00	100.00	100.00	75.00	94.00	80.00	100.00	100.00	100.00	50.00	70.00	75.00	69.00	65.00	50.00		100.00	83.00	70.00				
Small/Essex Skipper														33	27	18	15	6	1	1							101	101	101	
Large Skipper												5	2	31	32	41	18	3	1								133	133	133	
Clouded Yellow																											0	0	0	
Brimstone	8	7	11	3	2	17	14	6	8	5	5	4	2		1	14	1	27	32	24	6	9	7	2		1	190	216	198	
Large White										2	1				6	11	24	12	2	1	2	2	1				63	64	64	
Small White			1												6	23	10	3	6	1							50	50	50	
Green-veined White				5	14	11	5	2	2	1					11	9	2	23	11	4	10	5	3	3			93	121	108	
Orange-tip				3			8		2																		13	-1	19	
Green Hairstreak																											0	0	0	
White-letter Hairstreak																											0	0	0	
Small Copper																											0	0	0	
Brown Argus																											0	0	0	
Common Blue										1	1		2							4	1						9	9	9	
Holly Blue																						1					1	-1	2	
Red Admiral												2							2			1	1		1		6	7	7	
Painted Lady																											0	0	0	
Small Tortoiseshell			5			2	1							1								1	1				8	11	9	
Peacock	3	12	27	29	26	23	12	4	4	1	2					6	6	22	11	9	4						152	201	168	
Comma		1	3		1										1	3		5	2	1		1	1				17	19	19	
Speckled Wood										1	4	6	1	4	3					1			8	10	1	4	2	35	45	45
Marbled White																1										2	1	1	1	
Gatekeeper															1	27	45	30	32	5	8						148	148	148	
Meadow Brown											4	1	11	34	112	84	61	57	24	20	11	4	2	3	3	1	430	432	432	
Ringlet														24	152	195	74	48	20	3	1						517	517	517	
Small Heath																											0	0	0	
Total	11	20	47	40	43	53	40	12	16	11	17	18	18	127	352	432	256	236	144	74	43	32	26	9	8	4	1967	2075	2030	

## Chippenham Transect 2015

