

FRIENDS OF MARKSTAKES COMMON

10th ANNUAL REPORT 2018 - 19

Tenth Annual Report

Chairman - Rupert Hall

Treasurer/Membership - William Coleman

Secretary - Jacqui Hutson

Lewes D.C. Ranger - Thyone Outram

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Chairman's Summary

The last year has been a continuation of the maintenance of the cleared areas within the Common. Control of Bracken, Bramble and Birch is vital keeping the grassy areas and the Heather in good condition.

One particular focus this year has been the maintenance of the one significant piece of infrastructure on the site namely the boundary wall between Markstakes Common and the Markstakes Lane. The collapse of a large section of wall on our neighbour's land was rather a wake up call. Were the wall to fall down we would struggle to find the money to replace it. Several weeks were spent clearing the wall of invasive ivy and small trees and branches that were pushing against the wall. This not only prevented further damage but also allowed access for repairs. The council has paid for a flint wall specialist to repair where possible and the wall now looks much better. There are certain large trees that might threaten the structure in the future but dealing with these would entail major tree works.

Last year was a long hot summer and the dry soil and high temperatures made the glade maintenance more challenging. The time available was also reduced by the focus on the boundary wall. As a result the other parts of the Common have been more overgrown than usual. Happily the volunteers have been able to restore the areas over the winter and the spring.

Ian Woolsey and Ian Seccombe have continued their survey work on the Common. Bird populations appear broadly stable while the butterflies have shown a significant decline. Especially in Meadow Brown and Gatekeeper. This is concerning as it was a good year for butterflies in other parts of the area. As a first step we will be checking the vegetation in the sections of the site that have historically supported most insects. Again I would like to thank both Ian Woolsey and Ian Seccombe for the work they do as it makes us aware of issues on a timely basis.

We continue to be grateful for the support of the Council and the two rangers who are so involved in this site. The resources and expertise they bring to bear on areas that are beyond the capabilities of the volunteers is invaluable.

Finally but not least a very big thank you to the volunteers who cheerfully give their time each Monday to keep the site as special as it is.

Rupert Hall

Treasurer's Summary

Our team of volunteer members have continued doing a great job with the many tasks that we become involved with. There haven't been any new members joining us for a while, but work has been going on with excellent and inspiring results.

The very modest membership amount is still £2 and thank you if you send in a cheque or pay by bank transfer. Donations are always most useful so thank you if you have done this. Thank you to the Lewes DC for their support with the bigger items too.

The accounts are set out below and we have used a little of our funds to buy new things such as small tools.

William Coleman

FRIENDS OF MARKSTAKES COMMON Year 01/03/18 to 28/02/19

INCO	ME & EXPENDITURE	_	
INCOME	_ -	EXPENDITURE	
Subscriptions	28.00	TOOLS	54.62
Donations	8.00	PRINTING	0.00
Grants	0.00	POSTAGES	0.00
Other	0.00	Other	15.00
Total	36.00	Total	69.62
		Income over Expenditure	33.62

BANK RECONCILIATION						
Opening Bank Balance 01.03.18	153.24 Income over Expenditure	-33.62				
	153.24 Closing Balance 28.02.19	119.62				

BALANCE SHEET		
ASSETS		
BANK BALANCES	119.62	
OTHER ASSETS		
TOTAL ASSETS	119.62	
LIABILITIES		
CREDITORS		
OTHER LIABILITIES		
TOTAL LIABILITIES	0.00	
NET ASSETS(LIABILITIES)	119.62	

Ranger's Report

In 2018 the historic parts of the Markstakes Common flint wall had some muchneeded attention. The expert flint wall stonemason that carried out the maintenance confirmed that this was a wall constructed for show as well as for structure. If you look closely at the main parts of the wall, the flints are in orderly courses and the

mortar is scored into neat lines – similar to the picture below. Countryside walls constructed just to keep animals in or out are rarely this elegantly constructed. Contrast this to the area around the gate which was constructed much later – functional but not elegant. This was rebuilt by volunteers after the wall in that area was destroyed by a fallen tree.



Volunteers rebuild the gate area in 1994



Council finances cannot stretch to rebuilding the end of the wall where it has fallen or to creating a work of high walling craft out of the gate area, but the flint wall stone mason concentrated on the historic areas, repairing them back to their original quality which should preserve them for many years to come.

Many thanks to the Friends of Markstakes who spent many days in the summer clearing the wall to allow access to the stonemason.

Lewes District Council also organized tree safety works, path clearance works, the annual pond clearance and the diversion of the path around the feature oak. Many thanks to Brighton Conservation volunteers for help with these works.

Thyone Outram

Community Ranger Specialist Advisor (Downland and Nature Reserves) Lewes District Council and Eastbourne Borough Council

Survey Reports and Results

Butterflies



Photo: Purple Hairstreak, Markstakes Common, 22nd June 2018 © Ian Seccombe

Introduction and summary

This is the seventh consecutive year of recording butterflies at Markstakes using the United Kingdom Butterfly Monitoring Scheme (UKBMS) transect method. The Markstakes transect was walked on 23 of the 26 weeks specified by the UKBMS between the beginning of April and the end of September 2018. The recorders were Rupert Hall, Ian Seccombe and Ian Woolsey.

Sightings of butterflies occurred on 22 of the transect walks and 472 butterflies of 22 species were recorded. The number of butterflies was down by 31% on 2017, making 2018 the second worst year since these surveys began. In 2018 there were no sightings of Orange Tip, Small Tortoiseshell or Purple Emperor. Small Copper (2), Red Admiral (2), Green-veined White (1), Holly Blue (4) and Comma (4) were all reduced to very low numbers. By comparison the 2018 survey at Lane End Common (the nearest UKBMS transect site) recorded 37% more butterflies than Markstakes, despite being a much shorter transect, and a 32% increase in the number of butterflies compared with 2017.

The four broad trends set out in last year's report were reinforced in 2018:

- many species are found in very small numbers, these numbers fluctuate year to year but are generally falling: in 2018 half the species had fewer than 10 sightings
- year on year we are seeing fewer spring butterflies at Markstakes: in 2018 only 34 butterflies were recorded in the first six weeks of the season compared with 104 in the same weeks of 2014
- sightings are increasingly dominated by a few species notably Meadow Brown, Gatekeeper and Large White: in 2018 these three species accounts for more than half (53%) the records
- the distribution of butterflies is becoming concentrated in fewer areas: in 2018 four of the 12 transect sections had a combined total of only 13 butterflies over the entire season.

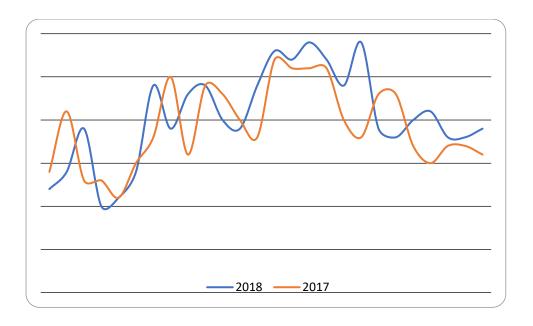
In addition, there is a very marked decline in the number of butterflies recorded in the Mire. When these surveys started this area recorded the largest share - around 40% - of all butterflies. In 2018 it had dropped to 22%.

Weather conditions

Chart 1 compares the temperature record for Markstakes in 2017 and 2018 and shows that the spring was colder while the summer was hotter and longer. The average temperature on the days when the transect was walked in 2018 was 21.2 degrees compared with 19 degrees in 2017. In 2018 nine of the walks were completed on days when the temperature was 24 degrees or higher compared with only five in 2017. As well as being warmer it was also sunnier. The average % sunshine on the days when the transect was walked was 73% in 2018 compared with 54% in 2017.

Chart 1 Temperature profile for Markstakes, 2017 and 2018*

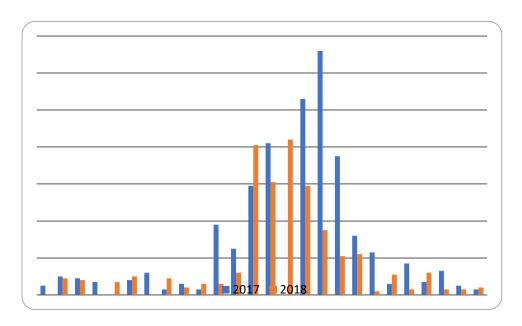
* Values for missing weeks are interpolated



Trends

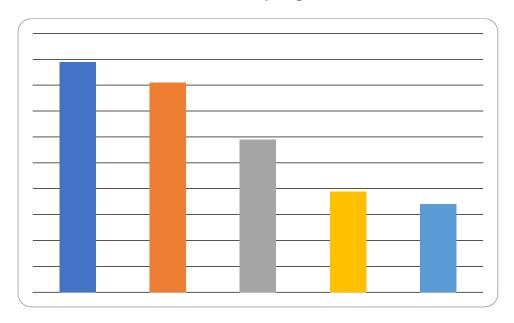
Chart 2 below compares the number of butterflies recorded each week in 2017 and 2018. It shows that the numbers recorded were lower in almost every week of 2018. Butterfly numbers peaked two weeks earlier in 2018 compared with 2017. This peak was in week 15 (July 8th) when 84 butterflies were recorded. Sixty percent of the butterflies recorded at the peak were Meadow Browns and Gatekeepers. Butterfly numbers fell very rapidly after this peak: only 25 were recorded in the last five weeks compared with 45 in the corresponding weeks of 2017.

Chart 2 Markstakes: Number of butterflies by week, 2017 and 2018



The early season was again very poor, continuing the trend of declining springtime butterflies (see chart 3).

Chart 3 Markstakes: decline of Springtime* butterflies, 2014 to 2018



^{*} For the purposes of this report Springtime is defined as the first six weeks of the recording season

Half of the 22 species recorded experienced a decline in 2018, particularly some of the grassland species that had been dominant in previous years. Meadow Brown, Gatekeeper and Ringlet numbers were each down by more than fifty percent. Overall, half the species recorded had fewer than ten sightings. Numerically the largest declines were amongst Meadow Browns (-160), Gatekeepers (-60), Peacock (-13), Silver washed fritillary (-12) and Ringlet (-9).

In 2018 Meadow Brown (157) were first recorded at Markstakes on 10th June (week 11) a couple of weeks later than the first sighting in Sussex (28th May), peaking (at 55) two weeks later and dropping off rapidly from the third week of July. This is a very different pattern to 2017 when they also first appeared in week 11 but did not peak until the end of July (week 17) and continued on until the end of August. Despite its decline in numbers Meadow Brown continues to be the most abundant butterfly in Markstakes, accounting for a third of all records

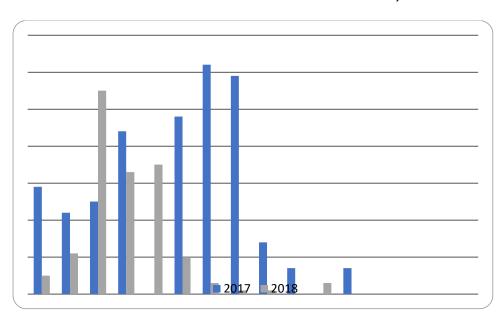


Chart 4 Markstakes: abundance of Meadow Brown, 2017 and 2018

Gatekeeper's (52) also had a shorter flight period in 2018. Appearing from 8th July, significantly later than the first sighting in Sussex (17th June), Gatekeeper's were only recorded for five weeks in 2018 compared with seven weeks in 2017. These changes in flight period may reflect the weather conditions and their impact on sources of nectar.

Despite the overall decline several species recorded an increase. Numbers of Small Skipper, Large Skipper, Brimstone, Large White, Small White, Common Blue and Small Heath were all up on the previous year.

Having been in marked decline for several years, Small Skipper did particularly well at Markstakes in 2018 with 22 sightings compared with only seven in 2017. Common Blue also seem to have recovered somewhat with 31 sightings in 2018. No Common Blue were recorded in 2016.

Nine White Admiral were recorded in 2018. This is better than recent years and back to the levels found when these surveys started. However, the number is still much lower than we might expect. For example, I recorded 12 White Admiral on a single 45-minute walk in Knowlands Wood less than half a mile from Markstakes.

In 2017 we recorded the first Purple Hairstreak on the transect. Purple Hairstreak may be present in reasonable numbers at Markstakes but tends to be under-recorded using the UKBMS method (the transect is walked between 11am and 3pm when Purple Hairstreak tend to remain in the tree tops). Nevertheless, in 2018 the number of Purple Hairstreaks recorded increased to 14 with sightings across a wide area. Purple Hairstreaks were recorded in sub-sections D, E, F and G in 2018. The increase may well be due to the recorders being more aware that Purple Hairstreaks might be present and therefore paying more attention to the Oak trees where they are most likely to be seen.

For the full list of species recorded, and their abundance, over the seven years see Annex.

. Distribution

With the exception of sub-section B all sub-sections of the transect recorded fewer butterflies in 2018 than in 2017. The biggest declines were in sub-sections G (the Mire), E (the Butterfly Glades) and F (the Friends' Glade).

The records continue to show a very uneven distribution of butterflies across Markstakes. Despite its decline, sub-section G (the Mire) had 18 of the 22 species present in 2018 and 21% (102) of all recordings. This is significantly lower than in 2017 when it accounted for 28% (194) of the total. Sub-section E (which includes the butterfly glades) had 13 species (compared with 19 in 2017) and 13% of recordings. In contrast sub-sections A, C, I and J had only 13 records and two species between them. Table 1 shows the number of species and butterflies in each sub-section of the transect in 2017 and 2018.

Table 1 Number of species and butterflies by transect sub-section, 2017 and 2018

2018

2017

	No. of species	No. of butterflies	% total	No. of species	No. of butterflies	% total
Α	1	4	0.6	1	1	0.2
В	12	47	6.9	15	62	12.9
С	2	5	0.7	2	3	0.6
D	12	86	12.5	16	65	13.5
Ε	19	106	15.5	13	63	13.3
F	10	61	8.9	11	45	9.4
G	18	194	28.3	18	102	21.3
Н	15	113	16.5	17	78	16.3
I	5	10	1.5	2	7	1.5
J	6	12	1.7	2	2	0.4
K	8	24	3.5	5	13	2.7
L	8	24	3.5	8	31	6.5
		686	100.0		472	100.0

No species were recorded in all the sub-sections but Speckled Wood (10 sections), Meadow Brown (9), Large White (8), Brimstone (8) and Gatekeeper (8) were widely distributed.

Table 2 shows the changing percentage distribution of butterflies by section over time. The main trends are the declining share of sub-section G (the mire) which has fallen from 41% in 2013 to 22% in 2018. Sub-section L (which runs along the northern edge of the bracken field) has also seen a decline. It consistently accounted for about 10% of records but since 2015 its share has dropped to between 4 and 6%. The main gains have been in sub-sections B, D and H. The latter having increased from 6% in 2013 to 17% in 2018.

Table 2 Distribution (%) of butterflies by transect sub-section, 2013-18

Section	2013	2014	2015	2016	2017	2018
Α	3.6	2.0	1.3	2.3	0.6	0.2
В	5.1	7.6	3.8	3.8	6.9	13.2
С	0.7	1.0	0.2	1.2	0.7	0.6
D	5.2	5.6	9.4	9.0	12.5	13.8
Е	10.7	11.5	17.9	14.8	15.5	13.2
F	12.9	9.3	7.5	10.8	8.9	9.4
G	40.9	36.4	30.2	38.4	28.3	21.7
Н	6.4	11.0	13.0	6.1	16.5	16.6
I	1.5	1.8	2.8	0.6	1.5	1.5
J	1.4	0.7	0.2	0.9	1.7	0.4
K	2.0	2.7	3.2	7.8	3.5	2.8
L	9.6	10.5	10.4	4.4	3.5	6.6

Brown Hairstreak update

The 2017 report highlighted the discovery of Brown Hairstreak eggs in Markstakes Lane, not far from the start of the transect and one of the most easterly recordings of Brown hairstreak eggs for Sussex. We had hoped that Brown Hairstreak might be added to our list of species in 2018 but none were seen. The hedge on Markstakes Lane was flailed severely in winter 2017/18 and it is unlikely that any of the eggs survived. However, during autumn 2018 Brown Hairstreak eggs have been reported at Markstakes farm, Tutts Farm and a female Brown hairstreak was observed egg laying at Knowlands farm.

Annex

Markstakes: number of butterflies recorded by species, 2013-2018

	2013	2014	2015	2016	2017	2018
Small Skipper	6	57	34	11	7	22
Large Skipper	4	5	5	1	4	8
Brimstone	29	32	41	23	15	21
Large White	73	33	24	23	30	43
Small White	4	12	2		2	9
Green veined white	16	2	3		6	1
Orange Tip	5	5	12	3	1	0
Clouded Yellow	2	1				
Small Copper	8	4	2	5	7	2
Holly Blue	1	3	2	4	4	4
Common Blue	15	33	14		25	31
White Admiral	10	6	2	4	5	9
Red Admiral	3	13	4	5	12	2
Peacock	20	51	42	48	25	12
Comma	10	6	10	7	8	4
Silver Washed						
Fritillary	35	28	15	12	27	15
Small Tortoiseshell	3	11	3	1		
Painted Lady	1		1	1		1
Marbled White	6	7	14	16	14	7
Purple Emperor		1	1	1	2	
Purple Hairstreak					1	14
Speckled Wood	55	29	21	32	43	40
Gatekeeper	44	63	77	45	112	52
Meadow brown	225	197	178	102	317	157
Small Heath	12	3	12	1	2	11
Ringlet	3		11	1	16	7

Ian Seccombe January 2019

Dragonflies and Damselflies

Table 2 Species recorded at Markstakes Common

Species	First Sighting
Broad-bodied Chaser	07/05/18
Beautiful Demoiselle	07/05/18
Hairy Dragonfly	16/05/18
Large Red Damselfly	27/05/18
Azure Damselfly	27/05/18
Keeled Skimmer	29/06/18
Southern Hawker	01/08/18
Common Darter	23/08/18

Birds

Our survey for 2018 showed some 46 species which was 3 up on the 43 seen on the last survey in 2017. This year I carried out a similar number of surveys, 12 in total, starting in February and ending in December.

Species	Common	Distribution	2016		2018
	Name			2017	
Anas platyrhynchos	Mallard	Seen on high pond	Р	Р	Р
Milvus milvus	Red Kite	Not seen this year	NS	Р	NS
Buteo buteo	Buzzard	Regularly seen overhead	O(4)	O(3)	O(3)
Accipiter nisus	Sparrow hawk	Not seen this year	NS	NS	NS
Falco tinnunculus	Kestrel	1 male seen several times	Р	Р	Р
		hunting			
Phasianus colchicus	Pheasant	Occasional birds seen in woods	Р	Р	Р
Scolopax Rusticola	Woodcock	Not seen	Р	NS	NS
Larus Canus	Common Gull	Group seen overflying	O(3)		O(9)
				O(5)	
Larus argentatus	Herring Gull	Group seen overflying	NS	O(5)	O(3)
Columba Oenas	Stock Dove	Male heard calling several times	Р	P	Р
Columba palumbus	Wood Pigeon	At least 8 breeding territories	6	7	8
Cuculus canorus	Cuckoo	Not heard this year	NS	NS	Р
Strix Aluco	Tawny Owl	One male seen and heard this	Р	NS	Р
Alcedo Atthis	Kingfisher	year Not seen	NS	NIC	NC
	Swift		NS	NS NS	NS NS
Apus apus Picus Viridis	Green	Not seen this year	P	P	P
Picus vinais	Woodpecker	Occasionally seen or heard	-	-	
Dendrocopos major	Greater Spotted Woodpecker	2 confirmed breeding territories	2	2	2
Hirundo rustica	Swallow	Seen overflying	O(4)	O(5)	O(2)
Delichon urbica	House Martin	Occasionally seen overhead	O(5)	O(18)	O(5)
Motacilla cinerea	Grey Wagtail	Not seen this year	NS	P	NS
Motacilla alba	Pied Wagtail	Seen this year several times	Р	Р	Р
Troglodytes troglodytes	Wren	At least 8 breeding territories	7	9	8
Prunella modularis	Dunnock	At least 1 breeding territories	1	1	1
Erithacus rubecula	Robin	At least 9 breeding territories	7	9	9
Turdus merula	Blackbird	At least 10 breeding territories	9	10	10
Turdus pilaris	Fieldfare	Migrant group seen feeding	O(5)	NS	O(5)
Turdus philomelos	Song Thrush	At least 4 breeding territories	3	4	4
Turdus iliacus	Redwing	Migrant group seen feeding	O(20)	O(5)	O(17)
Turdus viscivorus	Mistle Thrush	Seen several times	P	Р	Р
Sylvia communis	Whitethroat	1 possible breeding territory	2	1	1
Sylvia atricapilla	Blackcap	At least 3 breeding territories	2	4	3
Phylloscopus collybita		At least 8 breeding territories	7	8	8
Phylloscopus	Willow Warbler	Several migrants seen this year	NS	P	P
trochilus				<u> </u>	
Regulus regulus	Goldcrest	3 possible breeding pairs	2	3	3
Aegithalos caudatus	Long tailed Tit	At least 2 family parties seen	2	3	2
Parus Palustris	Marsh Tit	One seen and photographed	NS	NS	1

Parus ater	Coal Tit	Occasional sightings of 2 pairs	2	2	2	
Parus caeruleus	Blue Tit	At least 25 breeding territories	23	23	25	
Parus major	Great Tit	At least 9 breeding territories	8	7	9	
Sitta europaea	Nuthatch	At least 3 breeding territories	3	3	3	
Certhia familiaris	Treecreeper	At least 2 breeding territories	2	2	2	
Garrulus glandarius	Jay	At least 1 breeding territories	1	1	1	
Pica pica	Magpie	1 possible breeding territory	1	1	1	
Corvus monedula	Jackdaw	At least 2 breeding territories	2	2	2	
Corvus frugilegus	Rook	Seen overflying	O(6)	O(5)	O(4)	
Corvus corone	Carrion Crow	At least 2 breeding territories	2	2	2	
Sturnus vulgaris	Starling	Small flocks seen during year	O(7)	O(7)	O(5)	
Passer Domesticus	House Sparrow	Small group near stables	Р	Р	Ρ	
Fringilla coelebs	Chaffinch	At least 3 breeding territories	3	3	3	
Carduelis chloris	Greenfinch	1 Pair seen	NS	NS	Ρ	
Carduelis Carduelis	Goldfinch	Seen feeding on grasses in mire	O(3)	O(5)	O(2)	
Carduelis Cannabina	Linnet	Not seen	NS	Р	NS	
Pyrrhula pyrrhula	Bullfinch	Only 1 pair seen several times	1	1	1	
			42	43	46	
Totals =						
		Recorders	IW	IW	IW	
Number = breeding pairs; P = Present; O = Overflying (no.); NS = Not seen						

Recorders were Rupert Hall and Ian Woolsey in 2009, 2010, 2011, 2012, 2013 and Ian Woolsey in 2014, 2015, 2016, 2017 and 2018.

Amongst the more notable breeding successes this year were the **Blue Tits** with at least twenty-five breeding territories, **Blackbirds** with 10, **Great Tits** and **Robins** with 9 and Wrens with at least 8 breeding territories each, **Chiffchaffs** had at least eight territories, but **Chaffinches** were only three. Again, several pairs of **Greater Spotted Woodpeckers**, **Nuthatches** and **Tree Creepers** appeared to have been successful.

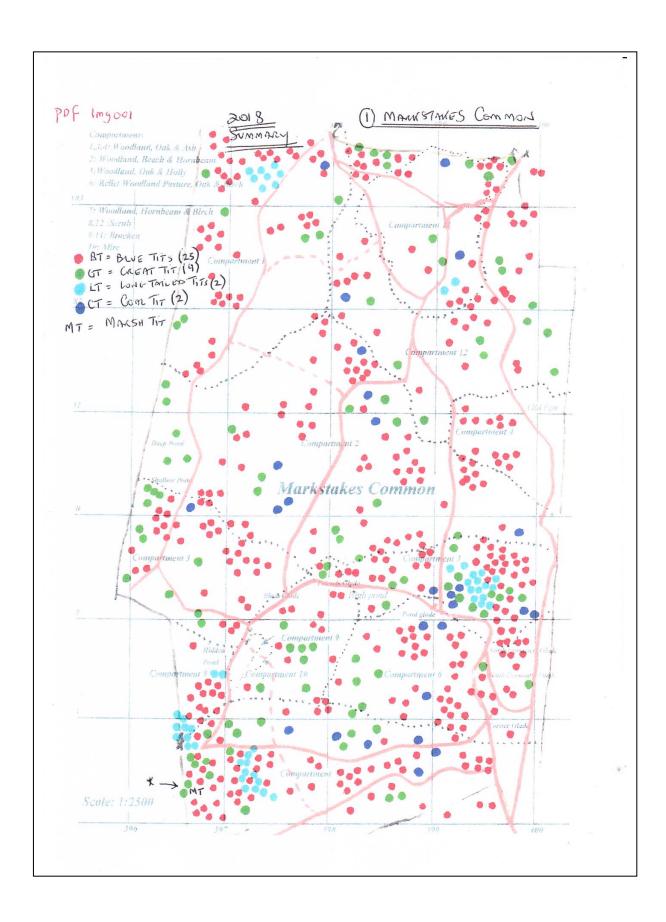
Again, as a result of the extended survey period, we were again able to pick up winter migrants and the sighting of **Redwing and Fieldfares** helped to increase the number of species seen.

Note - Total species seen over last 9 surveys -

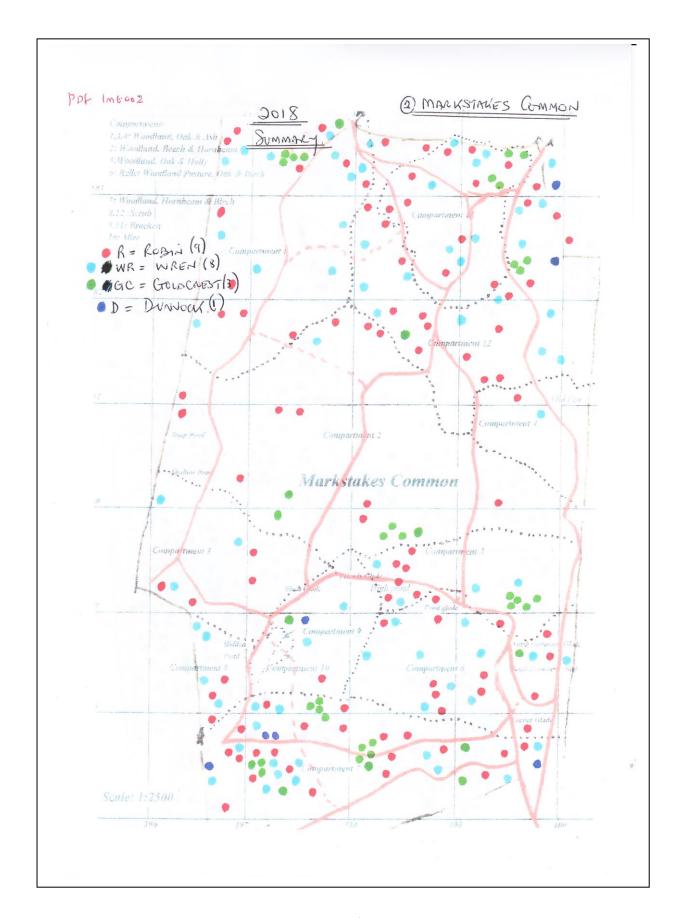
2010	2011	2012	2013	2014	2015	2016	2017	2018
45	46	47	46	45	43	42	43	46

See below for species recording maps

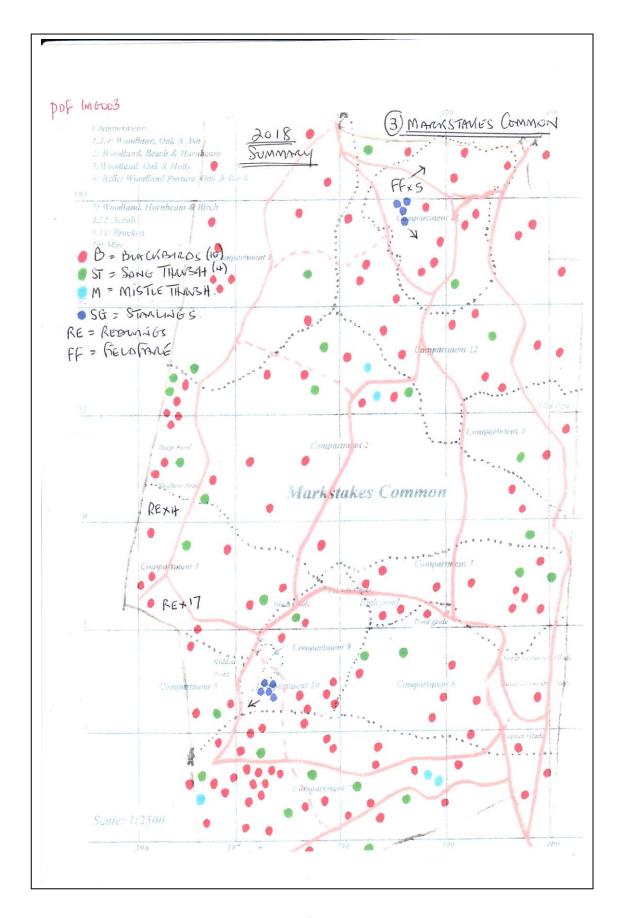
- 1. Tit Family.
- 2. Robin, Wren, Goldcrest, Dunnock.
- 3. Thrushes and Starlings.
- 4. Warblers.
- 5. Finches, Crows, Pigeon & Doves.
- 6. Nuthatches, Treecreepers, Woodpeckers.
- 7. Jackdaw, Carrion Crow, House Sparrows, Pheasants, Rooks.
- 8. Buzzard, Kestrel, Mallard, Stock Dove, Tawny Owl.
- 9. Swallows, House Martins, Gulls, Pied Wagtail, Cuckoo.



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