Malham Tarn

Wildlife & Weather Report 2013



Brian Shorrock Robin Sutton



Malham Tarn Field Centre Settle, North Yorkshire, BD24 9PU Tel. 01729 830331



2013 Wildlife Report - A Summary

An average winter followed by a very cold spring and early summer period delayed the arrival of many bird species, most notably Wheatear, Pied Wagtail, Swallow and Willow Warbler plus many others. Those that did finally arrive were in much smaller numbers than normal, Linnet was a typical example. Birds of the year were Slavonian Grebe, Yellowhammer and a rare inland record of a Shag presumably blown in by gales over the Christmas period.

Paul Holmes (1960) stated that both Dipper and Grey Wagtail bred on Cowside Beck. Visits there over the last two years have failed to make contact with either species. It would appear that both species are now only rare visitors.

A very good summer helped some butterflies to appear in above average numbers, particularly Small White and Peacock. The discovery of a colony of Small Pearl-bordered Fritillaries was possibly the event of the year, this is the twenty fifth species of butterfly for the Tarn recording area.

I would like to thank the following people for their contributions to this annual report: Tony Bullough, Roger Clark, Ian Court, Martin Davies, David Hodgson, Jo and Gerald Light, D and E Lord, Stuart Ralph, K and C Mudd, Richard Mann, Colin Straker, Dr M Holmes, Peter Welsh, Edward Jackson and Mike Cawthorn with apologies for any omissions.

Brian Shorrock

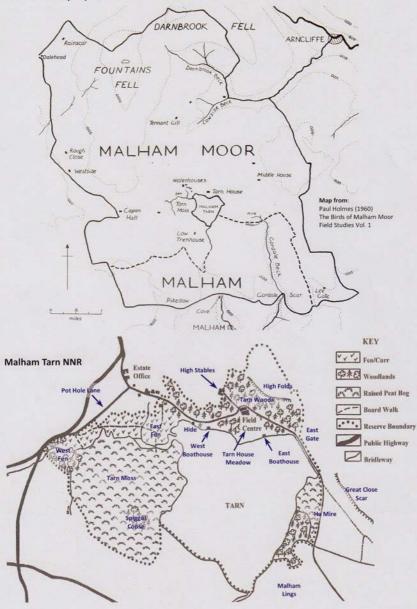
January 2014



Malham Tarn - Sunset Cloudscape - 25th November 2013

Cover Photograph – East Boathouse and Highfolds – late evening 25th November 2013 Photographs by Robin Sutton - http://robsuttonphotography.zenfolio.com/

Area covered by Report



Birds Records 2013

- Slavonian Grebe Podiceps auritus One in the Tarn Inflow bay from at least 8th 15th October is only the third record for the area; previously single birds on 10th September 1948 and 1st October 2005.
- 2 Little Grebe Tachybaptus ruficollis A single bird on 3rd January was the only early record, no more until one appeared on 24th June. Birds were present then until year end with a peak count of six on 28th August. No indication of a breeding attempt.
- 3 Great Crested Grebe Podiceps cristatus Appears to be lost as a breeding species and is now almost a rarity with only five sightings in the year single birds on 21st and 27th May and on 4th, 25th and 28th August, probably only two birds involved.
- 4 Cormorant Phalacrocorax carbo Still increasing, absent only April to June. Most sightings were in September and October when birds were present on a daily basis and up to six roosted near the Tarn on several dates in October.
- 5 Shag Phalacrocorax aristotelis One on 28th December the first for the area, presumably blown in on gales over the Christmas period.
- 6 Grey Heron Ardea cinerea A poor year, no records January/March and at other times single birds were the norm with four on 24th July.
- 7 Mute Swan Cygnus olor Three immature birds on the Tarn from 9th to 15th October were the first records since December 1999.
- 8 Whooper Swan Cygnus cygnus Just three records, sixty flying NNW over the Tarn on 14th March, two 10th October and one 15th October on the Tarn for a short period.
- 9 Pink-footed Goose Anser brachyrhynchus The only record was of fifty flying North to South over the Tarn on 7th January.
- 10 Greylag Goose Anser anser After gradually increasing over the last decade a marked drop in sightings during 2013 with only three records of single birds on 13th April, 21th May and 24th July.
- 11 Canada Goose Branta canadensis
 One pair probably attempted to
 breed but were unsuccessful.
 Numbers in summer seem to
 have stabilised, peak monthly
 counts below:



Whooper Swan

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	0	5	2	5	5	110	150	30	6	10	2	1
2012	0	2	4	3	17	150	150	1	10	18	2	13
2011	0	1	2	2	7	110	200	5	17	11	11	1
2010	0	0	4	8	18	120	200	8	15	19	15	0
2009	0	3	8	14	52	200	210	0	28	28	30	2

12 Mallard Anas platyrhynchos Two or three females seen with young June/July whether any reached flying stage is doubtful. Peak monthly counts below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	24	8	6	3	6	24	110	45	30	25	56	15
2012	40	6	6	4	6	31	50	50	18	8	26	6
2011	50	18	14	10	8	40	50	30	10	8	12	12
2010	6	10	12	2	3	50	50	60	115	50	52	10
2009	16	8	8	6	8	16	75	50	50	60	20	20

13 Wigeon Anas penelope Recorded January to 23rd April and 5th October to year end. Whilst present most days occasionally the flock is absent so probably at another site as yet unknown, possibly in the Ribble Valley near Long Preston or at Hellifield Flash. Peak monthly counts below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	26	35	30	30	0	0	0	0	0	30	45	45
2012	60	40	50	12	0	0	0	0	26	20	45	45
2011	70	45	50	40	0	0	0	0	6	55	80	70
2010	6	40	75	25	0	0	0	0	10	70	60	1
2009	90	70	70	45	0	0	0	1	2	12	40	45

14 Teal Anas crecca Status much the same as last few years with no breeding season records and only small numbers in winter months. Present January to 3rd February and 20th July to year end, peak monthly counts below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	12	18	0	0	0	0	2	6	8	1	6	2
2012	21	3	7	5	0	0	0	0	0	0	2	5
2011	2	4	7	5	0	0	0	0	3	0	8	6
2010	6	8	3	4	0	0	0	1	30	15	6	2
2009	8	18	8	10	0	0	1	8	20	12	4	10

Pochard Aythya farina Still decreasing, numbers were so small that they can all be quoted individually, two 3rd January, two 19th April, one 24th June, five 30th October, three 1st and 4th November and seven 7th November, peak monthly counts below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	2	0	0	2	0	1	0	0	0	5	7	0
2012	40	12	35	0	0	0	0	2	1	6	20	12
2011	4	5	5	0	0	0	3	1	1	2	16	56
2010	0	4	4	0	0	0	1	1	10	40	70	0
2009	50	60	45	1	1	1	4	12	6	10	10	4

16 Tufted Duck Aythya fuligula A rather good year with one pair raising four young which were first seen on 23rd July. Higher numbers than usual seen in autumn and early winter, peak monthly counts below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	0	14	18	50	30	12	32	40	60	120	120	70
2012	60	40	85	60	18	10	30	40	66	55	70	7
2011	9	60	55	40	8	11	40	35	150	100	75	70
2010	0	4	40	35	28	32	45	60	100	140	160	0
2009	40	60	70	70	22	27	80	50	35	30	20	15

17 Goldeneye Bucephala clangula Present January to 28to April and 15th October to year end with a peak count of 16 on 16th February, peak monthly counts below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	6	16	10	14	0	0	0	0	0	4	4	8
2012	9	8	16	11	0	0	0	0	0	3	6	2
2011	5	9	17	4	0	0	0	0	0	1	5	5
2010	2	4	12	18	0	0	0	0	0	6	5	0
2009	21	16	15	8	0	0	0	0	0	1	4	4

- 18 Goosander Mergus merganser From 13th April to 4th May up to four birds irregularly present in Tarn inflow bay, usually a pair but two males on 4th May. A female on Tarn 28th and 29th December a late record.
- 19 Buzzard Buteo buteo Attempted to breed at the usual site, outcome not known. Sightings well down on last year, peak monthly counts below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	0	1	2	1	1	0	0	1	1	0	0	0
2012	0	0	4	2	1	1	0	1	2	5	0	0
2011	2	0	0	2	1	2	0	2	1	0	1	0
2010	0	0	1	2	0	1	0	0	2	0	1	0
2009	1	1	2	3	3	1	0	1	4	1	1	0

- 20 Sparrowhawk Accipiter nisus Sightings were very few in 2013 with no breeding and only single birds seen on 29th March, 20th September, 4th and 24th November.
- 21 Kestrel Falco tinnunculus Sightings of this species were few throughout the year perhaps because of low small mammal populations. Apart from a bird in Darnbrook Ghyll on 6th May there were no other indications of any breeding attempt. Absent from Great Close Scar where usually attempts to breed.
- 22 Peregrine Falcon Falco peregrinus Only three records, one Chapel Fell 19th March, one Highfolds 27th May with two here 2nd September.
- 23 Merlin Falco columbarius A single bird on 3rd March near Waterhouses was the only record.
- 24 Red Grouse Lagopus lagopus Apart from a single bird on Fountains Fell 10th May all records came from the Dalehead area with a peak count of thirty on 3rd September.
- 25 Red-legged Partridge Alectoris rufa Just three sightings, one Henside 17th July, three High Trenhouse 18th October and three near Capon Hall 30th October.
- 26 Common Pheasant Phasianus colchicus Population is still low, peak count only seven near Dalehead on 28th August. The only breeding record was of a female with seven small young on lower slopes of Chapel Fell on 13th August.
- 27 Moorhen Gallinula chloropus Four records only, one near Sandhill Cottage on the Fen 1st May, two West Boathouse 2nd May, one Inflow Bay 4th September and one heard on the High Trenhouse ponds 21st September.



Pheasant

28 Coot Fulica atra Numbers of this species remain low. If anything 2013 was worse than 2012. Up to November a single bird was the norm, on 7th November three birds arrived, by 15th November five were present but just one by 11th December.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	0	1	0	1	0	1	0	0	1	1	5	1
2012	4	4	2	3	1	0	0	0	0	0	0	2
2011	9	8	6	3	3	1	2	4	0	2	2	1
2010	10	32	35	25	26	26	45	200	300	150	70	10
2009	150	60	50	40	15	16	18	100	250	300	300	300

- 29 Oystercatcher Haematopus ostralegus First back was on 16th February, rather early in view of the very cold weather at the time. Pairs were present at South Shore Field, High Trenhouse, Great Close Scar, Tennant Ghyll, near Capon Hall and Tarn Outflow where a pair with young 4th July. Last seen on 6th August
- 30 Golden Plover Pluvialis apricaria The first record was of a bird heard near Dalehead on 6th April, where small numbers were seen until 16th May with a maximum of just ten Northern Race birds on 20th April. Two alarming birds on summit plateau of Fountains Fell on 7th June. Thirty Five near Dalehead on 6th August and one 20th September. Away from Dalehead twenty two near Low Trenhouse 24th October with one hundred there on 30th October and 7th November.
- 31 Lapwing Vanellus Vanellus First of the year was on 16th February when fourteen present on South Shore Field. Bred at Dalehead, Capon Hall, Tarn Outflow and Great Close Mire, no more than ten pairs in total. Only one bird seen in July. More notable flocks were one hundred near Tarn 14th August, two hundred 25th September also near Tarn, and two hundred and fifty near Low Trenhouse 1th and 15th November.
- 32 Dunlin Calidris alpina One bird in breeding plumage on the Tarn East Shoreline 14th May the only record.
- 33 Common Sandpiper Actitis hypoleuco No sign of any breeding attempt and only three records on Tarn shoreline, one 14th May, two 19th May and one 13th August.
- 34 Redshank Tringa totanus Possibly did not breed, up to three birds were seen irregularly between Malham Lings and Great Close Pools in the period 19th April to 10th June, with a late passage bird near Tarn on 15th October.
- 35 Curlew Numenius arquata Arrival was on a late 13th March a good week later than normal. Bred near Dalehead where at least four pairs, and near Globe Flower Wood, Great Close Mire and Tennant Ghyll. The only notable flock was one hundred and twenty on Tarn Moss 26th June. Last record on 8th September.
- 36 Woodcock Scolopax rusticola One on Tarn Fen 5th April with one here on 28th November, three at the same site 30th November and a further single bird on 11th December the only records.
- 37 Snipe Gallinago gallinago Probably bred near Dalehead, two in display here on 12th April. Also heard drumming Great Close Mire, Malham Lings, Tarn Fen/Moss and near Globeflower Wood. Recorded in area from 6th April to 23rd September.
- 38 Black-headed Gull Larus ridibundus Remains common throughout year, only absent in severe wintery conditions. Formerly bred on Fountains Fell, fifty six pairs here in 1950, also on Great Close Mire and around the Tarn itself. Last breeding record was in 1967.



Black-headed Gull

- 39 Common Gull Larus carus Like Black-headed Gull has bred in the past. One pair did so near the Tarn in 1955 which was then the first Yorkshire breeding record. Since this date single pairs bred near the Tarn and on Fountains Fell summit from 1969 to 1984 with no breeding records since. In 2013 present in the area January to 19th April and from 18th July to year end.
- 40 Lesser Black-backed Gull Larus fuscus Recorded in area 27th February to 15th October. One hundred mainly immatures near Middle House on 10th June. Formerly bred on Tarn Moss in 1920-21 when six to seven pairs were present.
- 41 Great Black-backed Gull Larus marinus In the early months single birds on 1st, 5th and 16th January all on South Shore of the Tarn. One returned here 30th October with two on 10th November and four on 11th December and a further one on 28th December.
- 42 Feral Pigeon Columba livia Records were as usual confined to the Thoragill/Darnbrook area where the peak count was of twelve on 26th June.
- 43 Stock Pigeon Columba oenas What few records there were all came from the Dalehead/Silverdale area, with one 12th May, two 24th June and one 27th August.
- 44 Wood Pigeon Columba palumbus One in song near Tarn House on 9th January had probably overwintered. No more records then till return of breeding birds with six on 21th February, seven in song in Tarn Woods on 19th April, bred here and also Darnbrook. Peak count fifteen near Tennant Ghyll on 28th August. With no beech mast crop no birds were seen after 21th September.
- 45 Tawny Owl Strix aluco Though recorded throughout the year probably did not breed as the rodent population was virtually nonexistent in Tarn Woods. One bird was seen perched on a fence post in an open field during daylight hours in very cold weather on 5th and 6th April, presumably a very hungry bird.
- 46 Short-eared Owl Asio flammeus Probably bred near Dalehead with four here on 15th January and one 10th April and near Globeflower Wood where singles on 1st and 28th May.
- 47 Swift Apus apus Like 2012 sightings were few, up to six birds feeding over the Tarn 12th May to 24th June.
- 48 Kingfisher Alcedo atthis One at the Tarn from 10th September through to year end.
- 49 Green Woodpecker Picus viridis After many years of anticipated breeding one pair bred successfully at Highfolds, alarming bird heard here on 25th June and later a juvenile on 9th July. Two birds had been

heard calling in early spring but, sadly, one was found dead on the road near Waterhouses on 28th February. At least one bird present to year end.

50 Great Spotted Woodpecker

Dendrocopos major Two birds heard drumming in spring, at least one pair attempted to breed but no young were ever seen. One drumming on Highfolds from 12th to 25th May was probably an unmated bird. One rather strange sighting on 10th October was of a bird flying and perching on a roadside wall at Henside in a totally treeless area.



Great-spotted Woodpecker

- 51 Sky Lark Alauda arvensis First of year was on Malham Lings 28th February where later a few pairs bred. A flock of thirty near Low Trenhouse on 5th April was a reflection on the very cold spring. Bred at Street Gate and Fountains Fell. Finally seen on 6th August a rather early departure date.
- 52 Sand Martin Riparia riparia One near Gordale Beck flying towards Street Gate on 6th April was, in view of the wintry conditions at the time, very early. No more were seen till 15th April when three were at the Tarn Moss peat bank breeding site, here eight to ten pairs later bred. Forty-five birds here on 30th June suggested a successful breeding season, last recorded on 24th August.
- 53 Swallow Hirundo rustica The first of the year was late, a single bird at Waterhouses on 19th April. Bred Dalehead, near Capon Hall, Waterhouses and Low Trenhouse. The overall population was lower than normal and no late summer flocks of any note were seen. Last recorded on 20th September.
- 54 House Martin Delichon urbica Recorded 6th May to 12th September, the only sites known where breeding took place were at Waterhouses with four pairs and Low Trenhouse, one pair.
- 55 Meadow Pipit Anthus pratensis The first arrivals were late, three near Pot Hole Lane on 19th March. Bred near Dalehead, on Tarn Fen (three pairs), Malham Lings, Tarn Moss, Street Gate etc. The only notable flocks were fifty near Dalehead 8th September and fifty near Capon Hall 20th September. Last recorded 22nd November.
- 56 Pied Wagtail Motacilla alba Like many species arrival back was late, 19th March. The breeding population was also lower than normal. Bred Dalehead, Stangill, Capon Hall and Waterhouses where first juveniles seen on 26th June. Last record on 27th September.
- 57 Yellow Wagtail Motacilla flava Recorded in the area 29th April to 13th August. The breeding population was similar to the last few years with three pairs Low Trenhouse area, four pairs Tennant Ghyll and one pair at Stangill.
- 58 Grey Wagtail Motacilla cinerea One Tarn shoreline 19th April was the first record since 2010.
- 59 Wren Troglodytes troglodytes One probably wintered under the Tarn Fen boardwalk in early part of the year. Arrival back of breeding birds was not until early April. Six in song Tarn Woods 21st May. Practically all birds had departed by the end of September with just the odd bird seen October December.
- Dipper Cinclus cinclus One on Gordale Beck 19th April was the first record near the Tarn area since 14th June 1993 when a juvenile was seen on the Tarn Outflow stream. Birds continued to be seen on Gordale Beck on odd occasions until late October.
- 61 Dunnock Prunella modularis Probably bred at Dalehead, and near Tarn House, Keeper's Cottage, Waterhouses and High Trenhouse.

Population seemed much the same as in last few years.

- 62 Robin Erithacus rubecula One or two birds wintered at both ends of the year. Six in song Tarn Woods on 12th April, good numbers of juveniles appeared later in the year.
- 63 Redstart Phoenicurus phoenicurus First recorded on 27th April, a few pairs bred in Tarn Woods, one pair breeding successfully in a nest box in High Stables garden. A juvenile down Pot Hole Lane 13th August was the last sighting.



Robin

- 64 Wheatear Oenanthe oenanthe Arrival back was later than normal, two males near Tarn Outflow 7th April was the first record. Three pairs attempted to breed along slopes of Great Close Scar, also three pairs near Dalehead, one pair raised four young near Tarn Outflow. Last recorded on 28th August.
- 65 Whinchat Saxicola rubetra Threeear Dalehead on 28th August was the only record of this now rare species.
- 66 Song Thrush Turdus philomelos An average year, arrived back 19th February, seven singing birds in Tarn Woods on 13th April. Last seen on 14th August.
- 67 Redwing Turdus iliacus Few sightings this year. In early months the only record was of a flock of thirty near Pot Hole Lane 10th to 13th April. A few returned on 9th October with one hundred and fifty 11th October and eight 17th October with no more records till year end.
- Mistle Thrush Turdus viscivorus Probably only one pair attempted to breed, a single bird sang from 5th January to 24th April usually in the Sandhill Cottage to Tarn House area. Up to four were seen irregularly in Tarn Woods 26th August to 8th October.
- 69 Fieldfare Turdus pilaris Far fewer records than usual. In the early months was absent from sites where normally recorded, typically a hundred plus usually winter around Low Trenhouse. In 2013 thirty 1st January, one 19th February, sixty 10th April, thirty 18th April and finally seven on 1st May near Pot Hole Lane. Ten returned on 15th October with fifty 18th October and further flocks of up to one hundred on odd occasions near Capon Hall in mid December.
- 70 Blackbird Turdus merula Recorded in all months with no obvious influxes either in March/April or October/November. A few pairs bred in Tarn Woods and also one pair at Dalehead and one Dambrook.
- 71 Ring Ouzel Turdus torquatus A pair was located near Dalehead on 12th June and on 24th June was seen feeding young all of which successfully fledged, a notable record of this now rare species.
- 72 Blackcap Sylvia atricapilla First back were singing birds east of Tarn House and near Sandhill Cottage on 12th April. Breeding birds were well down on the



Blackbird

- last few years with probably only two pairs at most. No young were ever seen and the last sighting was on 30th June.
- 73 Common Whitethroat Sylvia communis One in a buddleia bush near Tarn House on 21st May was the only record.
- 74 Grasshopper Warbler Locustella naevia One singing below Shepherds Cottage for a few hours 27th June was the only record.
- 75 Willow Warbler Phylloscopus trochilus First to return was on 19th April, a good week later than normal. The breeding population was much lower than usual with only ten birds in song Tarn Woods on 12th May. A few juveniles were seen in late July with the final sighting on 24th August.
- 76 Chiffchaff Phylloscopus collybita Six sightings in the year of single birds on 27th April, 14th May, 16th July and 21st September. This species has increased considerably in the last decade and may have bred in some years but final proof is still lacking.

- 77 Goldcrest Regulus regulus Darnbrook plantations were not visited where surely still breeds. The only record was one on Tarn Fen 17th April.
- 78 Pied Flycatcher Ficedula hypoleuca Two singing birds arrived back on 30th April. One near Tarn House which probably didn't find a mate, and one near West Boathouse where a pair successfully raised young in a nest box a short distance from where they bred last year. A juvenile down Pot Hole Lane on 14th July was the last sighting.
- 79 Spotted Flycatcher Muscicapa striata First of the year was one near Tarn House on 16th May. An estimated six pairs attempted to breed with successful nests at the West end of Pot Hole Lane, Waterhouses and near Sandhill Cottage. Two on Tarn Fen 25th August the final sighting.
- 80 Great Tit Parus major Present throughout the year in small numbers, bred mainly in nest boxes. Due to a very cold spring and early summer breeding success was lower than in the last few years. Peak count was only eight on 10th April.
- 81 Blue Tit Parus caeruleus Bred at a variety of sites with the bulk of the population being in nestboxes. Few young were seen so probably had a poor season, peak count only ten on 19th March.



Blue Tit

- 82 Coal Tit Parus ater Two or three pairs attempted to breed in Tarn Woods, all were very elusive and no nests were located. Most sightings came from the birds feeders at
 - located. Most sightings came from the birds feeders at Keeper's Cottage.
- 83 Long-tailed Tit Aegithalos caudatus One possibly two pairs bred, one near Tarn House and one near Sandhill Cottage. The latter raised five young and a family party of six was seen here on 24th July. Later sightings included a flock of twelve on Tarn Fen 10th September and two small flocks here on 29th September, five were seen on 17th November and these were probably present to the year end.
- 84 Nuthatch Sitta europaea Five or six pairs bred in Tarn Woods which is probably as many as this site will hold. At least two pairs bred in nestboxes after going through the ritual of plastering round the hole. Often seen at the bird feeders at Waterhouses, Keeper's Cottage and Shepherd's Cottage. Present throughout the year.
- 85 Treecreeper Certhia familiaris Probably did not breed, only records single birds near Sandhill Cottage 18th July and near Tarn House 28th November.
- 86 Magpie Pica pica Practically all records came from West fen and in the Globe Flower Wood/Capon Hall areas, possibly attempted to breed at the latter. Records were usually of single birds apart from two 29th September and three 10th November.
- 87 Jackdaw Corvus monedula Present throughout the year in high numbers typically a flock of one hundred on 5th January near Tarn. Bred commonly at many sites eg Great Close Scar, Tarn House, Waterhouses and many barns in the area.
- 88 Rook Corvus frugilegus Bred as usual Spiggot Hill copse but no nest count was undertaken. One pair also possibly bred at Low Trenhouse.
- 89 Carrion Crow Corvus corone Remains common throughout the year with no obvious change in status.

90 Raven Corvus corax Away from the usual breeding site, where a pair raised four young, birds were seen near Tarn, Tennant Ghyll and around Dalehead where three on 8th And 20th September.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	0	2	2	0	0	2	1	3	4	0	0	1
2012	2	1	1	1	0	0	0	2	2	6	1	0

91 Starling Sturnus vulgaris Bred at Waterhouses and in Tarn Woods. Some more notable flocks during the year were one hundred near Capon Hall 30th June, eight hundred near Kiln House 4th July, five hundred Tennant Ghyll 10th October and seven hundred near Low Trenhouse in November. In late November and early December numerous flocks of between a few hundred and one thousand birds passed though the

Tarn area each evening for a period of about twenty minutes just before dark. They were obviously heading for a major roost site somewhere to the east and could be seen flying low over the ground eastwards roughly along the line of Mastiles Lane.

92 Chaffinch Fringilla coelebs As usual a few birds wintered at both ends of the year. The breeding population began to return late February and by 5th April twenty five plus were in song in Tarn Woods. One pair probably bred near Dalehead a site almost devoid of trees, Maximum flock was only fifteen on 4th August.



Chaffinch

- 93 Linnet Carduelis cannabina Arrival back was on schedule 26th April at Low Trenhouse where probably two pairs bred. Overall numbers were lower than usual and none were seen in the Capon Hall/Globeflower Wood area. One pair also seen at High Trenhouse and a further one near Dalehead. The only after season flock was of seven near Ha Mire on 21th September. Last record on 29th September.
- 94 Lesser Redpoil Carduelis flammea First of the year were six at the Keeper's Cottage feeders on 10th April, at least four pairs bred on Tarn Fen where juveniles were seen 4th August, last sighting on 5th October.
- 95 Goldfinch Carduelis Carduelis A few birds were seen in the winter months, mainly at the various bird feeders when up to six at times. Bred on Tarn Estate, one pair at least at Waterhouses. A flock of thirty Tarn House Meadow 25th August had climbed to seventy by 20th September, practically all of these were juveniles. Sixty at Dalehead 21st September, fifty Chapel Fell 5th October, forty Tarn Fen 8th October and finally twenty-five near Globeflower Wood 15th October. All these then dispersed and by November/December only one or two birds were left.
- 96 Greenfinch Carduelis chloris This species is very low in numbers at the present time. No evidence to suggest any breeding attempt in the area. All records came from the bird feeders where singles 6th April, 19th April, 18th July, 5th and 10th October with three 17th October.
- 97 Siskin Carduelis spinus All records came from Keeper's Cottage bird feeders with one 27th March, three 29th and 30th March, two 3rd April and one 24th April.
- 98 Bullfinch Pyrrhula Two sightings of this Tarn rarity, both on 15th October when single birds along Pot Hole Lane and near Tarn House.
- 99 Reed Bunting Emberiza schoeniclus Two or three pairs bred on Tarn Fen and possibly one pair at Tarn Outflow. A male at Dalehead 20th April could relate to a breeding bird. Recorded in the area 25th January to 14th August.

100 Yellowhammer Emberiza citronella A male at Waterhouses bird feeders for a short time on 26th February is only the fourth record for the Tarn area. The other three are two flying over Great Close Mire 21° March 1954, one 13th March 1974 at Low Trenhouse and one near High Trenhouse on 9th March 1994.

■2013

Species

First and last dates of main summer and winter visitors

Compared to the mean dates recorded in the annual Malham Tarn Wildlife and Weather reports (2005 -2012) most of the summer visitors arrived quite a lot later than average. The exceptions were Sand Martin, which arrived back just one day later and Blackcap which arrived much earlier than usual. The dates for Common Sandpiper are not very reliable as so few are recorded nowadays.

Departure dates are much more variable year on year and will often depend on breeding success. Birds which fail to breed will leave earlier and furthermore as most species will no longer be singing at the end of the summer it is also much harder to accurately record the final date when a species is on-site unless they are feeding young and are therefore more visible.

W	heatear	7 th April	23" September
Sa	nd Martin	6 th April	21 st August
Ch	iffchaff	27 th April	21 st September
W	illow Warbler	19 th April	24 th August
Sv	vallow	19 th April	20 th September
Co	mmon Sandpiper	14 th May	13 th August
Pi	ed Flycatcher	30 th April	14 th July
Ye	llow Wagtail	29 th April	13 th August
Н	ouse Martin	6 th May	12 th September
Sv	vift	12 th May	24 th June
Re	edstart	27 th April	13 th August
BI	ackcap	12 th April	30 th June
G	arden Warbler	- No	records -
Sp	otted Flycatcher	16 th May	25 th August
Se	dge Warbler	- No	Records -
Fie	eldfare	15 th October	1 st May
Re	edwing	9 th October	13 th April

Mean (± latest and earliest) Arrival Date

First Seen

Last Seen

In 2013 most of the species which have departure dates likely to be reasonably reliable (Redstart to Wheatear) seemed to leave slightly earlier than the average 2005 - 2012 date.

For the winter visitors, Fieldfare and Redwing, most will depart in April and will arrive back in October.

A late and cold spring perhaps held back the departure of over-wintering birds slightly.

Both species were about a week later than the average departure dates for Redwing (5th April) and for Fieldfare (26th April).

7-Jun 31-May

24-May

17-May 10-May

3-May

26-Apr

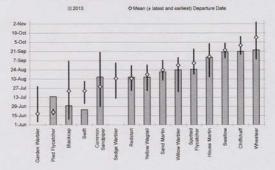
12-Apr 5-Ap

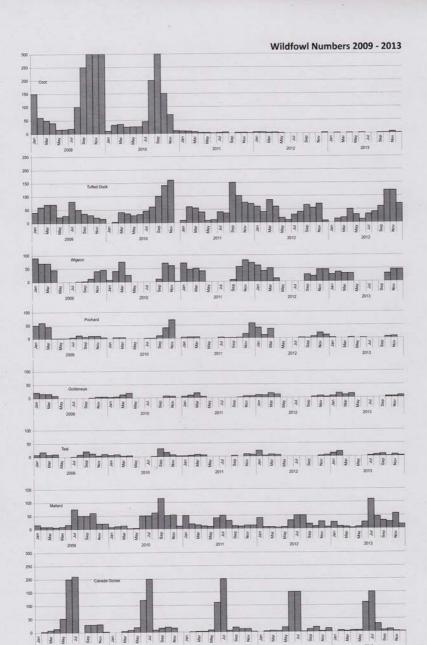
29-Ma 22-Mar

15-Mar

8-Ma 1.Ma

For returning birds the arrival dates in 2013 were within a couple of days of the average 2005 - 2012 arrival dates of 13th October for Fieldfare and 9th October for Redwing.





Butterflies

- Small Skipper Thymelicus sylvestris Just one record of a solitary individual near Dalehead on 24th July.
- Large Skipper Ochlodes venata Not recorded in 2013
- Brimstone Gonepteryx rhamni Not recorded in 2013
- Large White Pieris brassicae Only two records, both from Tarn House Meadow with two 14th August and one 21st August.



Small Skipper

- Small White Pieris rapae Normally a rather rare butterfly in the area but 2013 was a bumper year. Recorded from many sites in period 1st August to 20th September, peak count 21 near Dalehead on 7th August.
- Green-veined White Pieris napi A good year, recorded 16th May to 12th September. Maximum early count 6 was 31 on Tarn Estate 4th June with 55 on Tarn Fen the peak second brood count on 13th August.
- Orange-tip Anthocharis cardamines Not recorded in 2013
- Green Hairstreak Callophrys rubi A very poor year, only the Tarn Fen site was visited where one 1st June, 8 four 4th June and one 6th June were the only records.
- Small Copper Lycaena phlaeas Not recorded in 2013
- Northern Brown Argus Aricia artaxerxes Only two records of this elusive butterfly, single insects 18th July on 10 Tarn House Meadow and roadside above old quarry Chapel Fell.
- Common Blue Polyommatus icarus Recorded from a late 9th July to 25th August from the following sites, 11 Tarn House Meadow, Great Close Scar, Highfolds and roadside near old quarry below Chapel Fell. Maximum count 27 on 18th July.
- Holly Blue Celastrina argiolus Not recorded 12
- Red Admiral Vanessa atalanta Few records this year, recorded 6th August to 24th October with a peak count of seven on 4th September.
- 14 Painted Lady Vanessa cardui One near Waterhouses on 26th August was the only record.
- Small Tortoiseshell Aglais urticae A good year, one 2nd May and two 26th June the only early records. Commonly reported in



Peacock

- the period 1st August to 12th September with 40 at Dalehead on 7th August the maximum count.
- Peacock Inachis io After last years dismal summer with very few records of this species it was anticipated 16 that 2013 would be even worse. Amazingly numbers were exceptional with one 6th June then continuously present from 7th August to 4th September with a peak count of 99 on 26th August. Only once, in 2006, has this count ever been surpassed when 114 on 7th August.

- 17 Comma Polygonia c-album One near Waterhouses on 26th August was the only record.
- 18 Small Pearl-bordered Fritillary Boloria selene The discovery by Robin Sutton and Peter Welsh of a colony of this species at Ha Mire was one of the most notable events of the year. Presumably it has existed here for generations and has in the past been inexplicably overlooked, the nearest other colony is on Swarth Moor six miles or so to the North West. Up to eight individuals were recorded at the site during June, first seen on 11th.



Photo by David Askew

Small Pearl-bordered Fritillary

- 19 Dark Green Fritillary Argynnis aglaja Recorded 10th July to 4th September with a maximum count of only six on 26th August. Seen on Tarn Fen, Tarn House Meadow, Highfolds and roadside Chapel Fell with one at Dalehead 7th August a new site.
- 20 Gatekeeper Pyronia tithonus. Not recorded in 2013
- 21 Speckled Wood Pararge aegeria Not recorded in 2013
- 22 Wall Lasiommata megera Not recorded in 2013
- 23 Meadow Brown Maniola jurtina A moderate year, recorded 18th July to 4th September from Tarn House Meadow, Higfolds, roadside Chapel Fell and Great Close Scar. Peak count 19 on 14th August.
- 24 Ringlet Aphantopus hyperantus Seen at usual sites, Highfolds, Tarn House Meadow, roadside Chapel Fell, Thoragill, Great Close Scar and Ha Mire Wood. Maximum count 27 on 23rd July, flight period 10th July to 6th August.
- 25 Small Heath Coenonympha pamphilus Recorded from Highfolds, roadside Chapel Fell, Ha Mire, Malham Lings and Thoragill in period 18th June to 4th September, highest count 32 on 12th July.

Dragonflies & Damselflies

- Banded Demoiselle Calopteryx splendens Not recorded in 2013
- 2 Emerald Damselfly Lestes sponsa Not recorded in 2013
- 3 Large Red Damselfly Pyrrhosoma nymphula Up to two on Tarn Fen in period 10th to 25th June.
- 4 Azure Damselfly Coenagrion puella Seen on Tarn Fen 18th June to 23rd July, maximum count 15 on 12th July.
- 5 Common Blue Damselfly Enallagma cyathiaerum Not recorded in 2013
- 6 Blue-tailed Damselfly Ischnura elegans
 Not recorded in 2013
- 7 Common Hawker Aeshna juncae Recorded 5th July to 20th September, four on Tarn Fen on 17th July the peak count.



Azure Damselfly

- 8 Southern Hawker Aeshna cyanea Not recorded in 2013
- 9 Golden-ringed Dragonfly Cordulegaster boltonii Not recorded in 2013
- Four-spotted Chaser Libellula quadrimaculata A good year with up to four individuals on Tarn Fen 10th June to 17th July.
- 11 Broad-bodied Chaser Libellula depressa Not recorded in 2013
- 12 Common Darter Sympetrum striolatum Up to six on Tarn Fen 24th August to 27th September.
- Black Darter Sympetrum danae Recorded on Tarn Fen 14th August to 27th September, maximum count 11 on 4th September.



Four-spotted Chaser

Miscellaneous Sightings

Two interesting sightings of other invertebrates caught in the Moth Trap at Keeper's Cottage were a Forest Bug (also known as a Red-legged Shieldbug) – Pentatoma rufipes caught on the evening of 22nd August and a **Shore Sexton**Beetle – Necrodes littoralis on the evening of 23rd
September.

Neither species appears in the records held in NBN Gateway site for this area but both are reasonably common; their absence from the data set is likely to be due to under-recording.



Shore Sexton Beetle – Necrodes littoralis Keeper's Cottage 23rd September 2013



Forest Bug (Red-legged Shieldbug) – Pentatoma rufipes Keeper's Cottage 22nd August 2013

Moths I

I managed to run the trap on 56 occasions in 2013 between 12th April and 15th October. Poor weather limited the number of nights when it was possible to use the trap at the beginning and end of the year and also affected the number of species caught on some occasions but 141 species were recorded, eight more than in 2012. Of those 23 were species I had not recorded before at Malham Tarn though older historical records for the area exist for most of them. As last year some (about half) of the "new" species were micro-moths and once again my identification of these was much aided by the new field guide (Field Guide to the Micro-Moths of Great Britain and Ireland by

	No. of Nights Trapped	No. of Species Recorded
April	6	6
May	5	6
June	10	50
July	10	76
August	14	58
September	9	30
October	2	13

Phil Sterling, Mark Parsons & Richard Lewington (British Wildlife Publishing Ltd 2012)) and also through help from the members of the Yorkshire Moths group (http://groups.yahoo.com/group/Yorkshiremoths).

Records for this year also include one or two from a second trap run at Tarn House. This (an ALS Twin 30w Actinic Skinner Trap) was bought for use with students staying at the Field Centre and it is hoped that this will be operated

on a more regular basis in 2014. The first moth found on the first occasion that trap was used was a Bedstraw Hawkmoth – one of the undoubted highlights of 2013 and a spectacular first find for one set of students. Another highlight was the second Yorkshire record of Acleris effractana, an undistinguished small brown micro moth.

Rather nicer to look at were the Feathered Gothic and Chevron, also new for 2013. From a purely entomological point of view though the Autumn Green Carpet found at a ridiculously late mid season date of 11th July and a rare upland record for an Olive (26th August) were probably amongst the more interesting moths to be found in 2013.



Bedstraw Hawkmoth



Acleris effractana

Top 20 Most Caught Spe	cies
Antler	416
Large Yellow Underwing	326
Beautiful Golden Y	260
Ear Moth agg.	230
Flame Shoulder	189
Small Wainscot	179
True Lover's Knot	163
Agriphila straminella	148
Burnished Brass	131
Agriphila tristella	126
Dusky Brocade	104
Shears	103
Silver-ground Carpet	101
Clouded-bordered Brindle	97
Dark Brocade	92
Ingrailed Clay	91
Dark Marbled Carpet	61
Udea lutealis	57
Chrysoteuchia culmella	56
July Highflyer	55



Feathered Gothic



Chevron

Moths II - nightly catch from 125w MV Robinson Trap at Keeper's Cottage

Species (new species for 2013 are show					
(party)	hyd a	but in the first state of the fi	day of day of day of day of day of day of day of day of	200 ST	
Clouded Drab	1 1 3 1 1 2 3			12 Apr	07 May 14
Red Onestruit	(II)			16 Apr	111
Mottled Grey	5 2 1 4 9			22 Apr 0	
Small Quaker				22 Apr 0	
Ruddy Hightlyer				00 Jun	
Pale shouldered Brocade	C. C	1		Sec. 100	
Shears	13 12 13 10 19 4 8 6 8	1 2 2 2 1		my 60	190
Coxcomb Prominent		1		09 Juni	
White Ermine	20 0	1 1 1 1 1		09 Jun	145
Cartoned Twinsport Carnet	3 2 4 3 0 7	1 1 2 2 2 4 2 3 4 2 3	4 2 6	09 Jun 60	30
Flame Shoulder	2 6 1 5 7 7 4 19	30 10 10 7 24 14 8 11 6 13	1	09.1un	27.5
Glaucous Shears	1 2	200		10 Jun	- 1
Rustic Shoulder-knot	2 1 1 2 2 2 5	2 4 1 1 1		10 Jun	
Clackwot Musk-moth				16 Am	10
Lesser Swallow Prominent				16 Jun	
Ruby Tiger				16 Jun	13
Chrysotruchia culmella		1 8 10 13 7 7		16 Jun	11
Narrow-winged Pug		2 2 4 1 3		Je Ann	131
Spectacle	1	2 5 1 2 1 1 2 1 2		16 Aun	
Redutere Mask-moth				18 Jun	-
Brown Silver-line				18 Jun	
Common White Wave	1			18 Aun	17/4
Scalloped Hazel				18 Jun	<u> </u>
Water Carpet				18 Jun	
Common Swift	3 1 1 1 6			18 hm	7.5
Oak Erear				18 Aun	
Clouded Border		2 2		18 Jun	
Diamond-back Moth		1 1		18 Jun	86
Aethes cnicona		4 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6		18 540	m
Couldern contribute		1 1 1 2 2		18 Ann	48
Map-winged Swift	2 1 1 1 4	1 3 2 3 9 3 8 7 6		18 Jun	101
Small Phoenix				18 Jun	
Silver-ground Carpet	m	3 6 5 12 9 5 14 12 8 20 1	4	18 Jun	1
Red-ereen Carter			1	1 18 Aun	17.1
Common Wave	1	1		25 Jun	
Dusky Brocade	2 2 18 2	23 5 5 7 11 4 5 5 10 7		22 hr	200
Beautiful Golden Y	6 .	10 7 22 17 25 21 46 26 25		26 Jun	161
Green Arches	-	8 6		36 Jun	00
Ingralled Clay	3 2	6 2 4 7 4 10 11 18 12 12		26 Jun	-
True Lover's Knot	-	9 6 12 14 50 35 15 6 10 4	1 1	26 Jun 3	99
Large Vellow Underwing		1 1 1 3 3 8 12 1 5 9 4 35 41 10 16 4 20 40 6 10		26 Jun	123
Shery	1 2		2 5 1	1 1 26 Jun	100
Small Angle Shades Burnished Brass		3 2 2 5 7 42 21 27 15 2 1 1 1		29 Jun	ma
Peppered Moth				03 M	
Dotted Clay		2 3711911 3	-1	2 2 2	7.45
Small Dotted Buff				05 Aut	100
Agriphila straminella		3 7 31 13 18 44 23 3 1 1 1 1	1 3	JR 50	
Mouvella praelatella		10 4 6 9 4		77.90	
Green Carpet				100 M	100
Ancydis myrtsland				DZ 20	200
Middle-harred Minor				17.00	40
Olethriutes schulziana		1 3		07 Aul	
Crtypha lacunana				02 ME	11
Heart and Cliff					

Species	Scientific Name	Approximate Fight Period 2012 Approximate Fight Period 2012 Aus from	10	Dates Caught First Las	No.	Total	Maximum Catch No.
A Description of the last	Parison with mechanismical	Apr. Total Total		ľ	- Aug	64	20 10 March
Yellow Morned	Achico floricomin			12 Mar 12 Ma	Mar	1	1 12 Mar
Brindled Pub	Eustheca abbreviata			23 Mar 23 t	23 Mar	-	
farly Tooth-striped	Trichasterier carainsta			23 Mar 23 b	23 Mar	-	
Red Sword-grass	Nyferia vetusta			23 Mar 24.	24 Mar	2	
Common Quaker	Orthosia cerosi			23 Mar 23 h	23 May	.28	12 23 Mar
Clouded Drab	Orthoxia incerto			23 Mar 27 L	27 May	27	7 24 Mar
Chestnut	Conistra vaccivil			23 Mar 10.	10 Oct	. 3	
Brindled Ochre	Dosypolia templi			23 War 19	19 Oct	an .	2 19 Oct
Small Quaker	Orthosia cruda			24 Mar 241	24 Mar	2	2 24 Mar
Hebrew Character	Orthopia gothica			24 Mar 30	30 May	30	5 20 Apr. 3 Mar
Red Chestnut	Cerastis rubricasa			30 Mar 261	26 May	1	3 3, 23 May
Glaccoux Shears	Papestro biren			21 May 30	30 May	86	23 May
Dark Brocade	Biephanta odusta			21 May 12	12.34	143	25 10 lun
Powdered Quaker	Orthosia gracells			22 May 271	27 May	2	
Water Carpet	Comproperty's suffumatio			22 May 27 E	27 May	4	
Scalloped Hazel	Odontopera bidentata			22 May 30 l	30 May	00	3 23 May
Knot Grass	Acronicto rumicis			22 May 12.	12 Sun	s s	2 30 May
Lesser Swallow Prominent	Phrosia promo			22 May 1.	T T	20	2 23 May
Shears	Hodo plebeja			22 May 4.	434	162	39 30 May
Broom Moth	Melanchra pisi			22 May 16	- Jul	27	11 30 May
Striped Twin-spot Carpet	Nebulo sipicoto			22 May 3.5	3 Sep	18	2 22, 23 May
Ruby Tiger	Phragmotobia fullginosa			23 May 23 L	23 May		
Rustic Shoulder-knot	Apamed sordens			23 May 4.)rit	11	17 30 May
Prepared Moth	Biston betularia			24 May 16	lut.	7	2 8,1234
Spectacle	Abrostola triportita			24 May 10.	10 Aug	so.	1
Flame Shoulder	Ochrapleura plecto			24 May 14.	Aug	105	14 16 10
Autumn Green Carpet	Chlorochsta misto			24 May 21.	Oct	13	4 18,19 Oct
And the second control of the second control	Epitherna scuturbina			26 May 8.	8 Jul	00	2 26 May, 19 Jun
Flame Carpet	Xonthorhor designato			26 May 3.5	das	00	
Sprice Carpet	Thera britennica			27 May 27 h	27 May	1	1
Pale-shouldered Brocade	Locanobia cholossino			28 May 27	27 Juni .	4	2 27 Jun
Broken-barred Carpet	Electrophaes corylata			30 May 30 h	30 May	10	
Petible Prominent	Notadonta nicrae			30 May 30 M	30 May	100	1
Common Swift	Hepiplus Appulhus			30 May 30.	30 Jun	502	6 19, 27 Jun
White Ermine	Spilosoma fubricipeda			30 May 8.1	8 Jul	12	4 30 May
Sunar Thorn	Selena functoria			Am	10 Juni	1	
Poplar Hawk-moth	Leathor populi				10 Jun	2	
Clouded-bordered lirindle	Apamea crenata			en.	16.301	22	12 27 Jun
True Lover's Knot	Lycophotis porphyres				lut.	43	14 27 Jun
Dusky Brocade	Apamera remissa				9 Aug	135	53 4 50
Scinstone Moth	Opisthographis Autrolotia				14 Aug	-	2 12 Aun
Common Marbled Carpet	Chlorodysta truncata				18 Aug	9	
Clouded Border	Compagnils manginate.				12 Jun	-	-
Shren-ground Carpet	Xonthorhoe montanata				Aug	N.	7 244
Beautiful Golden V	Autographo pulchrina			un	14 Aug	58	18 12 54
Map-weged Switt	Hepighus fusconebuloso			19300	4 300	TA .	D S North
The state of the s	Aethes tratons			5 5	1	75	13 000
Middle humal Misor	Others flactuateds			No.	26 3.4	10	3,434
Large Vellow Underwork	Mortun programs				Seo	099	135 9 Aust
	Crosedus forboniedus				27 Jun.	5	4 27 Jun
Committee Whitee Whitee	Cohlem quantitie				you	0	
	Udea offensite				8.344	10	4 6.34
Garden Grass-veneer	Chrysoteuchia culmella				16 Jul	06	38 2.MI
Coscomb Prominent	Philodon capacina			2344 23	2706	·	2 2 Au
Green Arches	Anaplectoides prasina				16 Jul .	2	
Small Square-spot	Diarsia rubi				10 Aug	7	2 16 Jul, 10 Aug
Small Dotted Buff	Photedes minimg				18 Aug.	33	PF8 6
Burnished Brass	Dischrysia chrysitis				23 Aug	49	9 Aug
Elephant Hawk-moth	Deliratila elpenar				4 300	7	2 444
Small Angle Shades	Euphexia Aucipara			4301 43	4.304	7	
Narrow-winged Pug.	Euphthecia Aonotta			4.101 8	3 Jol	7	3 834
Purple Clay	Diarsis brunnes			4301 16	luc.	a	-
Purple Bar	Cosmorhoe ocellata			4301 73	Aug	7	-
Carch Pug	Cupithficia longiotta			430	you.	17	
Green Carpet	Colostygia pectinodaria			4.301 13	Aug	0	S Aug

2013 Weather Report - January - April

January	Summary	,		Mean for period 1961 -1990
Warmest Day				
Average Maximum		3.2	°C	3.6 °C
Coldest Day	25 Jan	-7.2	°C	
Average Minimum	°C	-0.9 °C		
Days with Air Frost		17	days	18 days
Wettest Day	25 Jan	23.0	mm	
Total Rain for Month	mm	154 mm		
Days with > 1mm Rain	18 days			
Sunniest Day	15 Jan	3.8	hours	
Total Sunshine		11.8	hours	35.3 hours

February	Summary	,		Mean for period 1961 -1990
Warmest Day	19 Feb	9.4	°C	
Average Maximum		3.5	°C	3.4 °C
Coldest Day	3 Feb	-3.6	°C	
Average Minimum		-1.5	°C	-1.1 °C
Days with Air Frost		23	days	17.3 days
Wettest Day	13 Feb	26.6	mm	
Total Rain for Month		71.6	mm	103.6 mm
Days with > 1mm Rain		7	days	13 days
Sunniest Day	27 Feb	9.1	hours	
Total Sunshine		77.8	hours	58.5 hours

March	Summary			Mean for period 1961 -1990
Warmest Day	5 Mar	10	°C	
Average Maximum		2.9	°C	5.7 °C
Coldest Day	11 Mar	-5.7	°C	
Average Minimum		-2.1	°C	0 °C
Days with Air Frost		24	days	15.2 days
Wettest Day	14 Mar	13.5	mm	
Total Rain for Month		43.6	mm	125.6 mm
Days with > 1mm Rain		8	days	15.8 days
Sunniest Day	12 Mar	8.3	hours	
Total Sunshine		74.5	hours	85.3 hours

April S	ummary			Mean for period 1961 -1990
Warmest Day	17 Apr	13	°C	
Average Maximum		8.2	°C	8.7 °C
Coldest Day	10 Apr	-3	°C	
Average Minimum	°C	1.8 °C		
Days with Air Frost		12	days	7.3 days
Wettest Day	14 Apr	14.3	mm	
Total Rain for Month		56.4	mm	90.5 mm
Days with > 1mm Rain		11	days	13.3 days
Sunniest Day	15 Apr	9.2	hours	***
Total Sunshine		119.9	hours	120.3 hours

January – the first week was mild and wet (maximum daily temperatures around 8°C, and 33mm of rain between the 1st and 8th). It then turned much colder. For the next 18 days the average maximum was a chilly 0.2° and the minimum daily temperatures reached a low of -7.2°C on the 25th – the coldest day of the whole year. The rain turned to snow with up to 15cm of lying snow around the met pen. There was a rapid thaw at the end of the month as we returned to mild (maximum of 9.9°C on the 29th) and wet conditions with 71mm of rain in the last week. Total rainfall was well below average.

February – the month started with near average temperatures and rainfall but by the 5th the temperature had dropped and the rain turned to snow. There was a brief thaw in the middle of the month before the cold weather and snow returned for a week or so and it then turned milder again for the last week, in other words fairly typical mixed February weather. Overall the month was about average in terms of rainfall but with less rain and more sunshine than average and with clearer nights a higher than average number of days with frost.

March - 2012 had given us the warmest March on record, March 2013 was one of the coldest. The mean maximum temperature of just 2.9°C was almost three degrees below the long term average March figure and the second lowest value recorded for the month. Rainfall was about a third of the average March level and the total of 43.6mm gave us the sixth driest March recorded at Malham Tarn. The key features of the month though were two snowy periods the first, around the 10th - 12th, blocked the roads for a day or two but a second spell around the 22nd to 24th was accompanied by gales and the loose powdery snow led to severe drifting and complete travel chaos.

April – the month started off cold and dry with just 2.7mm of rain from the 1st to the 12th and a mean maximum temperature of 5.3°C. In contrast the mean maximum temperature for the rest of the month was 9.9°C but even this was relatively dry with most of the rain (43mm) falling in the six days from the 13th – 18th. As in February and

March, cold, clear overnight conditions led to an above average number of days with a frost.

May S	ummary			Mean for period 1961 -1990
Warmest Day				
Average Maximum		12.1	°C	12.3 °C
Coldest Day	2 May	0.2	°C	
Average Minimum		4.6	°C	4.6 °C
Days with Air Frost		0	days	1.2 days
Wettest Day	9 May	21.0	mm	
Total Rain for Month		91.7	mm	92.3 mm
Days with > 1mm Rain		14	days	13.5 days
Sunniest Day	25 May	13.4	hours	
Total Sunshine		145.9	hours	163.4 hours

June S	ummary			Mean for period 1961 -1990
Warmest Day	7 Jun	18.5	°C	
Average Maximum		15.3	*C	15.1 °C
Coldest Day	2 Jun	2.7	°C	
Average Minimum		7.6	°C	7.6°C
Days with Air Frost		0	days	0.10 days
Wettest Day	22 Jun	12.8	mm	
Total Rain for Month		61.8	mm	93.7 mm
Days with > 1mm Rain		11	days	13.1
Sunniest Day	4 Jun	11.8	hours	
Total Sunshine		131.8	hours	151.5 hours

July St	ımmary			Mean for period 1961 -1990
Warmest Day	19 Jul	25.8	°C	
Average Maximum		20.1	°C	16.5 °C
Coldest Day	2 Jul	6.4	°C	
Average Minimum		11.6	°C	9.2 °C
Days with Air Frost		0	days	0 days
Wettest Day	27 Jul	44.1	mm	
Total Rain for Month		117.2	mm	100.3 mm
Days with > 1mm Rain		10	days	13 days
Sunniest Day	20 Jul	13.6	hours	
Total Sunshine		209.6	hours	136.4 hours

August	Summar	y		Mean for period 1961 -1990
Warmest Day	2 Aug	23.7	*C	
Average Maximum		17.5	*C	16.1 °C
Coldest Day	14 Aug	6.8	°C	
Average Minimum		10.9	°C	9.3 °C
Days with Air Frost		0	days	0 days
Wettest Day	4 Aug	32.1	mm	
Total Rain for Month		130.2	mm	130.8 mm
Days with > 1mm Rain		11	days	14.7 days
Sunniest Day	26 Aug	12.4	hours	-
Total Sunshine		134.2	hours	142.6 hours

May – after a cold late winter and early spring period the first week of May was pleasantly warm (average max. 13.1°C), dry (just 4.4mm of rain) and sunny. Most of the rain (75mm) fell in the next 10 days (9th – 18th) which were also cooler with an average maximum of 9.6°C. Warmer (average max 13.5°C) and drier conditions returned to end the month and overall the month ended up in many respects a very average month with temperatures, rainfall and sunshine all pretty close to the long term averages.

June – was a very average month in terms of temperature and sunshine with less rainfall and slightly less sunshine than average. The fact that there was nothing exceptional was a real contrast to June 2012 which in many respects had been the worst June we had ever seen at Malham Tarn. In the first six months of 2013 we had just 439mm of rain about half of the 874mm we had in 2012 and well below the average of about 700mm we get up here for the January to June period.

July - another contrast to 2012, in that year the maximum temperature only reached 20°C on one day in July and in total on only eight days in the whole year. In July 2013 we had sixteen days with temperatures above 20°C, on the 19th we reached 25.8°C (the tenth hottest July day here) and the average for the whole month (20.1°C) made it the third warmest July we've recorded. It was also the third sunniest July after 2006 and 1989. Rainfall was just above average yet we had slightly fewer rain days than average. There seems to be an increasing trend for summer rainfall to occur in fewer but more intense episodes. The 44mm that fell on the 27th made that the wettest day in 2013.

August – the first few days continued the warm and sunny weather of July, indeed the maximum for the month of 23.7°C was our highest August temperature since 2004. After that temperature dropped to more normal levels and overall the month ended up slightly warmer with near average sunshine and rainfall. As in July though the rain fell on fewer days per month than it would do on average, just 4 dates, 4th, 14th, 17th and 23rd accounting for approximately three-quarters off the months rain.

September - December

Septembe	er Summa	ry		Mean for period 1961 -1990
Warmest Day	°C			
Average Maximum		14.0	°C	13.8 °C
Coldest Day	8 Sep	3.2	°C	
Average Minimum		7.7	*C	7.6 °C
Days with Air Frost		0	days	0 days
Wettest Day	15 Sep	19.4	mm	
Total Rain for Month		85.6	mm	138.8 mm
Days with > 1mm Rain	14.5 days			
Sunniest Day	30 Sep	8.1	hours	-
Total Sunshine		78.65	hours	100.8 hours

October	Mean for period 1961 -1990			
Warmest Day	5 Oct	16	°C	
Average Maximum		12.2	°C	10.6 °C
Coldest Day	10 Oct	2.9	°C	
Average Minimum		7.8	°C	5.2 °C
Days with Air Frost		0	days	1.2 days
Wettest Day	22 Oct	37.7	mm	
Total Rain for Month		236.2	mm	150.8 mm
Days with > 1mm Rain		22	days	16.4 days
Sunniest Day	25 Oct	6.1	hours	
Total Sunshine		39.7	hours	80.0 hours

Novemb	Mean for period 1961 -1990			
Warmest Day	28 Nov	11.5	°C	
Average Maximum		7.4	°C	6.5 °C
Coldest Day	20 Nov	-3.1	°C	
Average Minimum		1.7	°C	1.2 °C
Days with Air Frost		7	days	8.8 days
Wettest Day	2 Nov	22.5	mm	
Total Rain for Month		99.2	mm	149.9 mm
Days with > 1mm Rain		14	days	17.1 days
Sunniest Day	5 Nov	7.	hours	
Total Sunshine		68.1	hours	54.9 hours

Decembe	Mean for period 1961 -1990			
Warmest Day	16 Dec	10.5	°C	
Average Maximum		7.0	°C	4.6 °C
Coldest Day	6 Dec	-1.6	°C	
Average Minimum		1.8	°C	-0.1 °C
Days with Air Frost		5	days	15 days
Wettest Day	8 Dec	30.4	mm	
Total Rain for Month		200.9	mm	162.0 mm
Days with > 1mm Rain		23	days	17.5 days
Sunniest Day	1 Dec	5.1	hours	
Total Sunshine		24.8	hours	37.5 hours

September – was dry with only about two thirds of the average rainfall. Most of the rain came in two spells. Over the two days of the 5th and 6th 26mm fell, and from the 15th – 19th we had 45mm. For the rest of the month it was largely dry. In terms of temperature it was very close to the average September figure but there was much less sunshine than usual. A rather settled and unexciting month really.

October – in contrast to September this was a very unsettled month with periods of strong winds and heavy blustery showers with just a few odd calmer days in-between. The high total rainfall for the month (236mm) made this the 5th wettest October at Malham Tarn. The 37.7mm of rain that was recorded on the 22nd was the eighth highest daily total for October, there were also three other days with over 20mm of rain. Temperatures were above average and not surprisingly given the high rainfall there was less than half the typical hours of October sunshine, in fact this was the least sunny October ever recorded at the Tarn.

November – started in a similar vein to October with a period of wet and windy weather but then settled down as a high pressure area built over the UK. Temperatures were just above average for the month but clear nights led to a series of air frosts later in the month and we had ground frosts on roughly half of the nights. Sunshine hours were slightly above average and despite the wet start to the month the total rainfall ended up well below the November average.

December - the relatively temperatures recorded in late November carried through into December and this ended up as the warmest December ever recorded at Malham Tarn. The high temperatures were associated with a series of intense low pressure Atlantic systems bringing in mild but wet and windy conditions. Rainfall was well above average and there was very little sunshine. The total 24.8 hours of sunshine was the eighth lowest December total. Gales were a frequent occurrence and an estimated 50mph wind speed was recorded on the 5th

December. Despite the wind and rain the nights were often clear and ground frosts were recorded on about half the nights. A sprinkling of wet snow lay in the met pen on the morning of the 25th December - by the merest margin a white Christmas but it didn't last long as the next depression moved in to wash it all away.