



Sulehay Nature Reserve Annual Report 2006



Introduction

This is the fourth Annual Report of the Sulehay Volunteer Group's activities and observations. The idea is to provide a record of the management work undertaken and the effect this has on the wildlife of the reserve. This complements the work of the Trust's own volunteer groups and studies done by the Limestone Ecology Group and the Wildlife Training Workshops. Past Annual Reports and much other information about the reserve are on the SVG's website www.sulehaynaturereserve.org.uk

The following people helped with the wardening of the reserve in 2006: Wendy Brooks, Graham Storey, Glen and Irene Hall, Norman and Pam Low, Nick Owens.

Staff changes. We welcome Paul Evans back to the BCN&P Trust. I am migrating to Norfolk, but hope to keep in touch and may continue to write this report from afar.

Nick Owens
August 2007

Management Programme 2006

A vigorous programme of management work has continued under the direction of Ron Follows and Mike Rogers. Details of the management plans to which they have been working are given on the website. The following were the main activities in 2006, which amounted to 819 man hours of work on the planning sheet, and many more hours in practice.

Scallop markers replaced and repainted in Sulehay Forest

Coppicing work continued in the pheasant pen in Ring Haw Wood. Muntjac deer were flushed out and fencing made secure, though some rabbits probably remained inside.

Overhanging branches cut back along Mucky Ride.

Sycamores cut along line of drystone wall, Sulehay Forest. More wall repaired.

Paths mowed throughout reserve.

Nassington Bottoms Close and Long Glade mown and cleared.

Ragwort monitoring and pulling throughout the reserve.

Walden Hill cut and cleared in September, then sheep fencing erected with gates and style.

Grass on Harebell Corner and the next sector of the Calcining Banks was cut and cleared.

Sheep: the flying flock grazed East Field, Sammocks West and East and Walden Hill during 2006.

Spraying: Some spot spraying of ragwort on Walden Hill and Nassington Bottoms Close was carried out.

The following people were members of the Sulehay Volunteer Group who carried out the work: Mike Rogers, Ron Follows, Dave Hobbs, Mel Gloster, Burma Canham, Davyd Smith, Clive Ellington, David Cole and Ian Warrington.

Birds

Fifty five **Bewick's swans** were observed flying SE over Sulehay Forest on 27/02/06. Mike, Ron and Nick all saw them, after hearing their calls. This is an uncommon species in Northamptonshire and perhaps they were moving from Rutland Water to the Nene Washes, where many spend the winter.

On the day of the Wildlife Training Workshop (Bird Monitoring) at Ring Haw our records included 5 **whitethroats**, 3 **blackcaps**, 2 **garden warblers**, 2 **willow warblers**, 1 **cuckoo**, 1 **buzzard**, 1 **sparrow hawk** and 1 **kestrel**. No **turtle doves** were heard. Heavy rain put a damper on the day!

Sand martins nested on the Rutland Oil site north of Sulehay Forest. 70 active holes were counted on 7/7/06, when a **hobby** was also present. Sand martins also nested again - in smaller numbers - in Yarwell Pits.

A **green sandpiper** was in Yarwell Pits on 12/10/06. On 16/10/02 there were 2 **buzzards**, a **redpoll**, a **grey wagtail** and a **water rail** calling at Ring Haw. On 16/10/06 the first **redwings** of the autumn were seen coming in to roost in Sulehay. Ten redpolls were in Sulehay Forest on 17/10/06.

Regular bird counts were again made by Antony Mould and Larry Graham. Their species list is given below. Full details are with the Limestone Ecology Group records

Blackbird	Long Tailed Tit
Blackcap	Magpie
Blue Tit	Marsh Tit
Bullfinch	Mistle Thrush
Canada Goose	Nuthatch
Carrion Crow	Pheasant
Chaffinch	Pied Wagtail
Chiffchaff	Pippit sp.
Coal Tit	Red Kite
Cormorant	Redwing
Cuckoo	Robin
Duncock	Rook
Fieldfare	Skylark
Garden Warbler	Song Thrush
Goldcrest	Sparrowhawk
Goldfinch	Starling
Great Spotted Woodpecker	Swallow
Great tit	Swift
Greenfinch	Tawny Owl
Green Woodpecker	Tree Creeper
House Martin	Turtle Dove
Jackdaw	Whitethroat
Jay	Willow Warbler
Kestrel	Wood Pigeon
Lesser Whitethroat	Wren
Linnet	

Mammals

A **stoat** was seen hunting amongst a log pile in Sulehay on 19/03/06. It kept popping its head out to look at us from different points between the logs.

Mammal boxes

The dormouse boxes along the main ride in Sulehay Forest were inspected on 17&18/10/06. Boxes 1-35 were found. No. 36 was missing. 16 boxes contained old tits' nests. A **wood mouse** was in box 15 and a **pygmy shrew** in box 33. Two boxes contained **tree wasp** nests. Several boxes were damaged or on the ground and all were repaired and re-erected.

Plants

The **greater butterfly orchids** in scallop 43 were provided with protection from deer by placing branches over the site before the appearance of the orchids in the spring. This was a successful strategy as 9 flowering spikes appeared and none was damaged. In 2005 six flower spikes appeared but three were damaged before the flowers opened.

	Plants	Flower spikes
2003	c.5	1
2004	14	4
2005	20	6
2006	c.20	9

On Sammocks Hill there was a very good display of **cowslips**, especially at the top end of Sammocks East. New species identified included **hairy rock cress** (*Arabis hirsuta*) on both east and west sectors. Both these species probably came from imported seed, with the latter maybe originating from Collyweston. It is an uncommon plant in Northamptonshire. Other new species for the reserve were identified by Neil Crossman as follows

Cerastium glomeratum, sticky mouseear
Cerastium arvense, field mouseear (R)
Cerastium semidecandrum, little mouseear (R)
Erophila verna, common whitlowgrass
Alopecurus myosuroides, blackgrass
Verbena officinalis, vervain (R)
Festuca gigantea, giant fescue
Alopecurus myosuroides, blackgrass
Picris hieracioides, hawkweed oxtongue (O)
Senecio erucifolius, hoary ragwort (O)
Greater periwinkle, Vinca major

301 flowering plant species have now been identified across the whole Sulehay Reserve, including Wansford Pasture since the Reserve was acquired in 2000. The table below shows the number of species found in each sector, with totals for occasional, rare and very rare species (based on *The Flora of Northamptonshire* by Gent and Wilson).

	EF	SF	SQ	RHW	RHG	NBM	WP	SW	SE
Total species	58	131	154	58	143	46	79	68	74
Occasional	5	25	32	11	29	4	8	9	4
Rare	0	9	6	1	7	0	2	2	2
Very Rare	0	2	4	0	6	0	1	1	1
Total uncommon species	5	36	42	12	42	4	11	12	7

EF = East Field

SF = Sulehay Forest

SQ = Sulehay Quarry

RHW = Ring Haw Wood

RHG = Ring Haw Grasslands

NBM = Nassington Bottom Mires

WP = Wansford Pasture [not fully studied]

SW = Sammocks West

SE = Sammocks East

We can see that the most diverse sectors were Sulehay Quarry and Ring Haw Grasslands, which also headed the uncommon species totals. This is an interesting finding in view of the recent establishment of these habitats, which were actively quarried until the 1970s. The recreated habitats on Sammocks Hill are steadily acquiring new species, though some of the early colonisers, such as arable weeds, are disappearing. (As a comparison, Miriam Rothschild's famous meadow at Ashton, created in the 1980s has about 120 recorded flowering plant species).

We might also question the relative poverty of Sulehay Forest itself, which is a legacy of its neglect in the years when it was used as a shooting estate. The creation of more open areas would be very beneficial. The clearing work on mucky ride has already resulted in the reappearance of **herb paris** (*Paris quadrifolia*) in May 2006, (discovered by Perdita Cawthorne) It would be good to see the creation of glades and rides along the lines of those in Ring Haw wood.

Insects

There were 7 **glow worms** on glow worm ride on 28/6/06 with two further ones on the set aside land on the other side of the hedge.

Butterflies

Ron and Judy Follows continued their fortnightly transects at Ring Haw. The table below gives their total counts for each of the last three seasons.

	Total 2006	Total 2005	Total 2004
Black Hairstreak	3	0	0
Brimstone	25	25	57
Brown Argus	82	60	58
Clouded Yellow	5	1	6
Comma	13	14	24
Common Blue	238	218	169
Dingy Skipper	9	7	9
Essex Skipper	3	24	14
Gatekeeper	75	252	425
Green Hairstreak	7	7	8
Green-veined White	21	72	64
Grizzled Skipper	14	26	31
Holly Blue	1	20	5
Large Skipper	22	19	16
Large White	8	110	52
Marbled White	7	0	1
Meadow Brown	1748	1429	986
Orange-tip	16	31	7
Painted Lady	57	1	17
Peacock	25	65	68
Purple Hairstreak	0	0	0
Red Admiral	19	2	17
Ringlet	163	172	96
Small Copper	26	5	13
Small Heath	207	169	191
Small Skipper	46	226	42
Small Tortoiseshell	4	32	86
Small White	19	37	107
Speckled Wood	58	73	59
White Admiral	0	0	0

Of note in 2006 was the recording of **black hairstreaks**, which were first seen on the reserve in 2004. There is clearly a small population surviving on the blackthorns in the area of the Calcining Banks. **Marbled whites** seem to be becoming established in the area of the Calcining Banks. **Common blues** and **brown argus** did well, but **gatekeepers, tortoiseshells** and **grizzled skippers** were scarce. **White admiral, white letter hairstreak** and **purple hairstreak** were not recorded in 2006 – see below for summary.

Butterflies recorded in Sulehay Forest and Stonepit Quarry 2000-2003 and on the whole reserve including Ring Haw from 2004

	2000	2001	2002	2003	2004	2005	2006
Black hairstreak					*	*	*
Brimstone	*	*	*	*	*	*	*
Brown argus	*	*	*	*	*	*	*
Clouded yellow	*			*	*	*	*
Comma	*		*	*	*	*	*
Common blue	*	*	*	*	*	*	*
Dingy skipper	*		*	*	*	*	*
Essex skipper	*		*	*	*	*	*
Gatekeeper	*		*	*	*	*	*
Green hairstreak	*		*		*	*	*
Green-veined white			*	*	*	*	*
Grizzled skipper	*		*	*	*	*	*
Holly blue			*	*	*	*	*
Large skipper	*		*	*	*	*	*
Large white	*		*	*	*	*	*
Marbled white					*	*	*
Meadow brown	*		*	*	*	*	*
Orange tip		*	*	*	*	*	*
Painted lady	*		*	*	*	*	*
Peacock	*	*	*	*	*	*	*
Purple hairstreak		*	*	*	*		
Red admiral	*	*	*	*	*	*	*
Ringlet	*		*	*	*	*	*
Small copper	*		*	*	*	*	*
Small heath	*		*	*	*	*	*
Small skipper	*		*	*	*	*	*
Small tortoiseshell	*		*	*	*	*	*
Small white	*		*	*	*	*	*
Speckled wood			*	*	*	*	*
White admiral	*	*	*	*			
Whiteletter hairstreak				*			

Dingy and Grizzled skipper project – Ann Konig

A project was begun by Ann Konig, who lives in Yarwell, on these two species in Stonepit Quarry. Four sites were chosen with different lengths of vegetation and counts made of the occurrence of dingy and grizzled skippers at each site. Initial results suggested a liking for an area with very short vegetation, dominated by ground ivy, by grizzled skippers, while dingy skippers appeared on longer vegetation. The start of the project was hampered by very wet May weather, and it is hoped that the work can be continued in 2007. It will be very useful to have some detailed information about the exact habitat requirements of these two threatened species.

Moths

Ron Follows and Mike Rogers continued their moth trapping regime during 2006. The full results are on the website. The table below was provided by Ron and shows some of the highlights of the season. The species shown with a dark square are first records for the reserve. Nb means nationally notable, RDB means red data book. Concolorous seems to have been scarce in 2006.

Vernacular	Taxon	Status	2002	2003	2004	2005	2006
Festoon	Apoda limacodes	Nb				6	5
Emperor	Saturnia pavonia	Common					1
Barred Hook-tip	Watsonalla cultraria	Local					1
Oak Lutestring	Cymatophorima diluta hartwegi	Local					1
Frosted Green	Polyploca ridens	Local		1	5		12
Lesser Cream Wave	Scopula immutata	Local					2
Dwarf Cream Wave	Idaea fuscovenosa	Local			1		1
Vestal	Rhodometra sacraria	Migrant					2
Tissue	Triphosa dubitata	Local					1
Brown Scallop	Philereme vetulata	Local					1
Pinion-spotted Pug	Eupithecia insigniata	Nb			2		1
Peacock Moth	Macaria notata	Local					1
Large Thorn	Ennomos autumnaria	Nb					1
Convolvulus Hawk-moth	Agrilus convolvuli	Migrant					1
White Satin	Leucoma salicis	Local					1
Rosy Footman	Miltochrista miniata	Local				1	1
Dark Sword-grass	Agrotis ipsilon	Migrant		1	4		5
White-point	Mythimna albipuncta	Migrant					1
Delicate	Mythimna vitellina	Migrant					1
Old Lady	Mormo maura	Local					1
Concolorous	Chortodes extrema	RDB3	5	5	41	22	1
Small Mottled Willow	Spodoptera exigua	Migrant					4
Scarce Bordered Straw	Helicoverpa armigera	Migrant					3
Marbled Clover	Heliothis virescens	RDB3					1

Dragonflies

Dragonflies seem to have been less abundant in 2006. The species recorded during their butterfly transects by Ron and Judy are shown below.

		Sulehay 2002	Sulehay 2003	Ring Haw 2004	Ring Haw 2005	Ring Haw 2006
Azure damselfly	<i>Coenagrion puella</i>	*	*	*		
Banded demoiselle	<i>Calopteryx splendens</i>	*	*	*	*	
Black-tailed skimmer	<i>Orthetrum cancellatum</i>	*	*	*	*	
Blue-tailed damselfly	<i>Ischnura elegans</i>	*	*		*	
Broad-bodied chaser	<i>Libellula depressa</i>		*	*	*	
Brown hawkler	<i>Aeshna grandis</i>	*	*	*	*	*
Common blue damselfly	<i>Enallagma cyathigerum</i>	*	*	*	*	*
Common darter	<i>Sympetrum striolatum</i>	*	*	*	*	*
Emperor Dragonfly	<i>Anax imperator</i>	*	*	*	*	*
	<i>Libellula</i>					
Four-spotted chaser	<i>quadrimaculata</i>	*				
Hairy Dragonfly	<i>Brachytron pratense</i>	*				
Large red damselfly	<i>Pyrrhosoa nymphula</i>	*	*	*	*	
Migrant hawkler	<i>Aeshna mixta</i>	*	*	*	*	*
	<i>Sympetrum</i>					
Ruddy darter	<i>sanguineum</i>	*	*	*		
Southern hawkler	<i>Aeshna cynea</i>	*	*	*	*	

Some further insect records were also kindly supplied by Peter Kirby for Sulehay Forest: **Old Sulehay Forest, 27 June 2006:** Miscellaneous records made while dog-walking, mostly of things on flowers and dead wood.

Coleoptera

<i>Abdera quadrifasciata</i>	Na	saproxylic
<i>Biphyllus lunatus</i>	1	saproxylic
<i>Dorcatoma desdensis</i>	Na	saproxylic
<i>Epitrix atropae</i>	Nb	<i>Atropa belladonna</i>
<i>Euophryum confine</i>	c	saproxylic
<i>Grammoptera ruficornis</i>	c	saproxylic
<i>Hylesinus oleiperda</i>	1	saproxylic
<i>Hypulus quercinus</i>	RDB2	saproxylic
<i>Lissodema denticolle</i>	Nb	saproxylic
<i>Malthinus balteatus</i>	Nb	saproxylic
<i>Opilo mollis</i>	Nb	saproxylic
<i>Rutpela maculata</i>	c	saproxylic
<i>Sinodendron cylindricum</i>	1	saproxylic

Diptera

<i>Xylota segnis</i>	c	saproxylic
<i>Xylota sylvarum</i>	1	saproxylic

Lepidoptera

<i>Ethmia dodeceea</i>	Nb	<i>Lithospermum officinale</i>
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Bumblebees: A further species of cuckoo bumblebee, a male *Bombus bohemicus*, was identified on spear thistle on the perimeter of Sulehay Forest on 24/7/06. A further cuckoo bumblebee, a queen *Bombus campestris*, was identified from a photograph taken on 25/7/05, also on a thistle by the main ride. This brings the total cuckoo bumblebee species to five (out of a possible six), and the total bumblebee species to twelve (records by Nick Owens).