29 Wood Hill (Smith's Field) & Carwood Close



Burngreave Green Audit

Introduction

Extending eastwards from Carwood Close on the hillside between Petre Street and Grimesthorpe Road

is a large site known both as Wood Hill and Smith's Field. Its two names are appropriate. The northern

most slopes where the ruins of the old Wood House are located are wooded. The central and southern

slopes of the hillside are grassland with scattered scrub. A survey in 1988 indicated that the grassland

was dominated by common bernt, Agrostis capillaris. This is no longer so. Although there is still a fair

amount of acid grassland, a large percentage of the grassy slopes are now covered with grasses that

thrive in fertile conditions, namely false oat-grass and cocksfoot. Yet, immediately adjacent to these

fertile grasses is bare ground and a large expanse of the moss Polytrichum commune.

Although privately owned there is public access via several footpaths, one of which is a sign-posted

Public Footpath.

Fly tipping is a major problem, especially off Grimesthorpe Road.

Local residents are also troubled by young motorcyclists riding without due care over the fields

including the amenity grassland where small children play. On the north-eastern side of the site some

motorcyclists laid out a small track with tyres.

Site details

Site name

Wood Hill a.k.a. Smith's Field

Carwood Close

Location

Ordnance Survey Grid Reference SK 368 895

Land owner

City Associates (Netheredge)

The land along Carwood Close where there is a belt of trees and shrubs screening the industrial units

from the Carwood Close housing estate is owned by the Sheffield City Council.

Nearest road/street

Grimesthorpe Road

Carwood Close

518

Petre Street

Adjacent land use

Grimesthorpe Allotments are located directly across Grimesthorpe Road from the site, but Grimesthorpe Road to east of site is residential. There is a housing estate on Carwood Close on the western perimeter of the site. There are several industrial units on Petre Street along the full length of the southern perimeter of the site.

Size

5.12 hectares

Present management

According to Jean Wood, a local resident and member of All Saints Tenants and Residents Association, the amenity grassland near Carwood Close housing estate is mowed once a month by Sheffield City Council. The remainder of the grassland is unmanaged.

Large amounts of dead wood in woodland indicate that the woodland is unmanaged.

The belt of trees along Carwood Close appears to be unmanaged. Some residents have registered concern about low hanging branches which in winter can scratch cars.

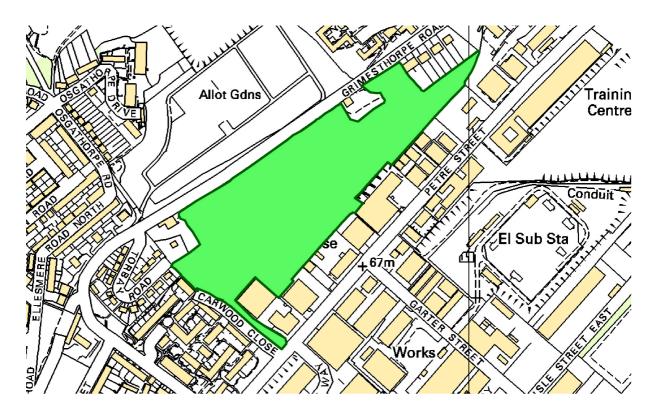
UDP designations

Open Space area.

Area of Natural History Interest.

The western edge of the site along Carwood Close is a Proposed Housing Area.

Location map



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Ecology

Phase I ecological survey

Site description

The northern most slopes where the ruins of the old Wood House are located are wooded. There is dense scrub, mainly elder but with plenty of hawthorn and goat willow. Along Grimesthorpe Road the different composition of the upper woodland is quite evident. Sycamore is the dominant species in the western half and common ash, in the eastern half. Lower down the slope sessile oaks replace sycamore as the dominant species. Nearer the ruins there are younger trees, some obviously self-seeded, while others - cotoneasters and silver birches – may have been planted. This younger wood is like a sheltered ride in spring, but offers little respite from heat of summer sun, as it is still quite open.

On the slopes south of the wooded areas, bracken dominates one western hillside. Further west near the housing estate there is Japanese knotweed and great bindweed. Elsewhere banks of bramble and stinging nettles or stands of rosebay willowherb form the woodland edge.

The central and southern slopes of the hillside are grassland. Broad expanses of rank coarse grasses are divided by seams of acid grassland running from NE – SW down the hillside. In addition there are large areas of species poor acid grassland on the lower slopes. The site is also unusual in that there are sudden contrasts of high and low fertility right next to each other. For example, bare ground and patches of the moss *Polytrichum commune* exist adjacent to breast high coarse rank grasses.

On these slopes there is also scattered scrub and large islands of Japanese knotweed. Impenetrable scrub inhibits access to south-eastern portion of site. There are ruins here and vegetation indicates area may have been used as a garden or allotments.

Near the housing estate of Carwood Close there is amenity grassland which children use for informal play.

Along the eastern side of Carwood Close from Petre Street to Smith 's Field there is a belt of trees and shrubs that the City Council planted to act as a screen between industrial units along Petre Street and Carwood Close housing estate.

Habitats of interest

The grassland holds the greatest ecological interest. Some of the site is dry acid grassland which is a UK BAP priority habitat.

Visually the grassland is stunning¹ for only part of the year, and really probably only to people who appreciate the beauty of grasses.

At other times of the year the grassland is a rather unimpressive beige colour stretching from one end of the site to the other. The height of the rank coarse grasses inhibits access to some of the site for part of the year. Most of the foot traffic in summer is along footpaths across centre of site. Few wade into the breast high grasses of the lower slopes.

Specialist invertebrate studies indicate that the grassland is rich in species attracting large numbers of common invertebrates and a few rare ones.

Historical maps provide clues to the present characteristics of the grassland. For instance, according to a nineteenth century map, the Public Right of Way which crosses the site from NW to SE was a tree-lined green lane between fields. There is a seam of acid grassland now where this field boundary once existed and this is one area of the grassland where scattered trees and scrub are still found.

The acid grassland described in the footnote occurs on the lower slopes. The nineteenth century map indicates that this area was a separate compartment.

Both the neutral grassland and the acid grassland are species poor. Few flowering herbs are found growing amongst the grasses.

The woodland is relatively recent. The 1885 map only shows a scattering of trees growing south of Wood Hill House and field boundaries lined with trees. East of the green lane (now a Public Right of Way) was cultivated. This area now has roses, a lilac and ivy. Access is good until ivy carpeting ground makes it impossible to proceed further east. Further on access to the upper slope is again possible via a steep path up from grassland. Mature trees are massed along southern perimeter, but younger trees on either side of path form a woodland ride leading to ruins of house. Mature ashes and a sycamore grow along Grimesthorpe Road which was formerly known as Occupation Road.

West of the Public Footpath is mature woodland. The structure of the western woodland is poor. It lacks diversity in age and species. It is basically sycamore and elder. There is too much standing deadwood and access to the interior is poor.

There are also trees growing along the southern perimeter of the site. Some of these, such as the goat willows, may be quite old. Others, like the black poplar, are probably recent introductions. The belt of

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¹ In summer the mixture of grasses creates a delightful mosaic. Colours change from the lush green of creeping soft grass to the red stems of wavy hair grass and bronze flower heads of bent to the creamy seedheads of Yorkshire fog and false oat-grass. There is a variety of textures too. Bent looks fluffy or frizzy next to wavy hair grass. Both *Holcus* species present, creeping soft grass and Yorkshire fog, are soft to the touch. The taller grasses all wave in the breeze.

shrubs and trees along Carwood Close to Petre Street was planted by the Sheffield City Council about the same time that the housing estate was constructed.

Scrub is abundant. The amount of elder growing on the site is notable. It forms much of the understorey of the western mature woodland and it still grows on the lower grassy slopes especially near the old green lane. An elder hedgerow stretches eastwards along perimeter of mature trees as one heads towards ruins of Wood Hill House. Access to the south-eastern portion of the site is inhibited by the growth of impenetrable scrub which is mostly elder.

Bramble is also abundant along the woodland edge. Roger Butterfield indicated that one large area of bramble that was impenetrable from the south and inaccessible from the north due to a high stone wall along Grimesthorpe Road would make an excellent breeding habitat for birds.

The potential for a healthy woodland and grassland butterfly population is also very good due to the available habitats. Nectar for adults is obtainable from spring through autumn. There are food plants for caterpillars – stinging nettles (small tortoseshell, peacock, red admiral, comma), ivy (holly blue), sheep's sorrel (small copper), crucifers (whites) and grasses (speckled wood, gatekeeper, meadow brown). The woodland and stone walls provide cracks and crevasses in which vanessids can hibernate over winter.

Species of interest

Species of nature conservation importance are listed in the Appendix.

There is an unusual oak tree on the upper slope east of the public footpath. It is more like a shrub than a tree and may be a hybrid. Leaves are convex and deeply veined. Foliage, except for a few lower branches that have characteristics of Sessile oak, do not have ragged edges.

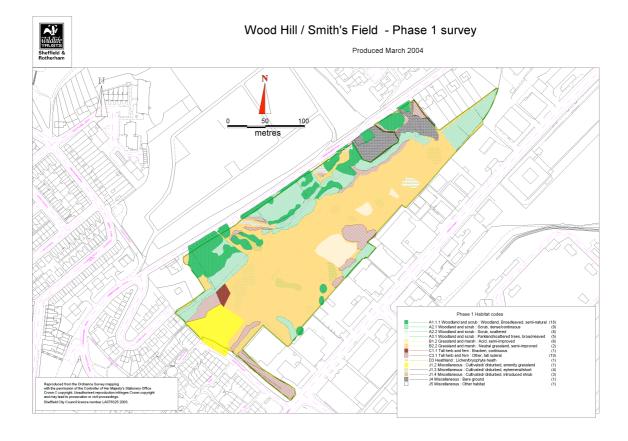
The Duke of Argyll's Tree Plant, *Lycium barbarum*, in the *Solanaceae* family grows on the uppermost slope where other cultivars like lilac were planted. Cultivars such as geraniums and flowering currant are also found on the eastern perimeter of the site.

The crucifer *Lepidium draba*, hoary cress, is abundant at the top of the grassland slope. Basal leaves in spring are spotted. The spots disappear as the plant develops. Flowerheads are white and well-scented. A caterpillar was discovered feeding on it. This crucifer is considered a rampant weed in some parts of the country.

The grassland is species poor. However, some of the smaller hawkweed species such as *Hieracium* pilosella, mouse-ear hawkweed and *Hieracium umbellatum*, leafy hawkweed, as well as *Hypochaeris* radicata, cat's-ear do grow here. There is also *Rumex acetosella*, sheep's sorrel, which is the food plant of the Small copper which is one of the grassland butterflies recorded here.

There are large islands of Japanese Knotweed. Great bindweed grows amongst this knotweed. Bindweed flowers earlier than the knotweed. It is quite a sight in mid summer to see the knotweed draped with the large white funnel flowers of bindweed.

Phase 1 habitat map



Invertebrates

Species noted

Unidentified: flying insect with long thin orange body

Arachnid: small black spider

Coleoptera: ladybird, click beetles, beetles

Hymenoptera: ants – white dot on rear, ants – black dot on rear, tawny mining bee, honey bee,

queen buff-tailed bumblebee

Lepidoptera: caterpillars: small tortoiseshell, small white, cinnabar moth,

Odonata: dragonfly: brown hawker

Galls: none noted

Specialist Lepidoptera survey

Small skipper

Large skipper

Large white

Small white

Orange tip

Small copper

Common blue

Holly blue

Painted lady

Small tortoiseshell

Peacock

Comma

Speckled wood

Gatekeeper

Meadow brown

Cinnabar moth

Specialist invertebrate survey

Holly Blue seen on a brief reconnaissance visit on 19 July 2003.

Main survey: 23 July 2003 in the afternoon, by sweep net.

The most interesting area (cross hatched on map) proved to be along the bottom south east edge.. Two Sheffield Red Data Book species – a Soldier Fly *Pachygaster atra* and a Snail-killing Fly *Pherbellia ventralis* were found in a damp area in the SE corner.

The main un-mown grassland area had good numbers of common species.

The old garden/orchard area was only briefly surveyed owing to lack of time but should prove interesting.

Results of survey undertaken on 23 July 2003:

Scientific name	Common name National		Comment
	Grade		
Lithobius forficatus	a centipede	Common	
Chorthippus brunneus	Common field grasshopper	Common	
Amara eurynota	a ground beetle	Local	Scarce in Sheffield
Agriotes sputator	a click beetle	Common	
Rhagonycha fulva	Common red soldier beetle	Common	
Adalia bipunctata	Two-spot ladybird	Common	
Coccinella septempunctata	Seven-spot ladybird	Common	
Grammoptera ruficornis	a longhorn beetle	Common	
Thymelicus sylvestris	Small skipper	Common	
Pieris brassicae	Large white	Common	
Pyronia tithonus	Gatekeeper	Common	
Maniola jurtina	Meadow brown Common		
Tyria jacobaeae	Cinnabar	Common	
Chorisops tibialis	a soldier fly	a soldier fly Common	
Pachygaster atra	a soldier fly	Common	2 nd Sheffield record
			LRDB
Microchrysa polita	a soldier fly	Common	
Melanostoma scalare	a hoverfly	Common	
Platycheirus clypeatus sens.	a hoverfly	Common	
str.			
Platycheirus granditarsa	a hoverfly	Common	
Episyrphus balteatus	a hoverfly	Common	
Sphaerophoria interrupta	a hoverfly	Local	
Sphaerophoria scripta	a hoverfly Common		
Eristalis arbustorum	a hoverfly Common		
Eristalis pertinax	a hoverfly	a hoverfly Common	
Eristalis tenax	a hoverfly	a hoverfly Common	
Syritta pipiens	a hoverfly Common		
Physocephalia rufipes	a bee-killing fly	Local	Rare in Sheffield
Anomoia purmunda	a gall fly	Nr	Notable for N England
Terellia ruficauda	a gall fly	Common	

Noeeta pupillata	a gall fly	Common	
Paroxyna misella	a gall fly	Common	
Pherbellia ventralis	a snail-killing fly Common		
Arge gracilicornis	a sawfly	Local	3 rd Sheffield record LRDB
Lasius niger	Small black ant	Common	3 rd Sheffield record
Megachile centuncularis	Patchwork leaf-cutter bee	Local	Uncommon in Sheffield
Bombus pascuorum	Common carder bee	Common	
Oniscus asellus	a woodlouse	Common	
Philoscia muscorum	a woodlouse	Common	
Porcellio scaber	a woodlouse	Common	

Vertebrates

Bird Survey

SPECIES				
RECORDED				NUMBER OF
ON AT LEAST	POSSIBLE	PROBABLE	CONFIRMED	TERRITORIES
ONE OCCASION	BREEDING	BREEDING	BREEDING	HELD BY
DURING THE	SPECIES ¹	SPECIES ²	SPECIES ³	SELECTED
BREEDING SEASON				SPECIES
				0120120
D. 441.4				
Blackbird	Robin	Blackbird	Tit, Blue	Thrush, Song –3
Blackcap		Blackcap		
Bullfinch		Chiffchaff		
Chiffchaff		Goldfinch		
Dove, Collared		Pigeon, Wood		
Dunnock		Thrush, Song		
Goldfinch		Tit, Great		
Greenfinch		Whitethroat,		
Jay		Common		
Magpie		Wren		
Pigeon, Stock				
Pigeon, Wood				
Robin				
Sparrow, House				
Thrush, Mistle				
Thrush, Song				
Tit, Blue				
Tit, Coal				
Tit, Great				
Tit, Long-tailed				
Wagtail, Pied				
Whitethroat, Common				
Wren				

¹ Evidence: present on more than one occasion in suitable breeding habitat.

² Evidence: singing/displaying male in suitable breeding habitat on more than one occasion; pair in suitable habitat showing courtship or territorial behaviour; bird visiting probable nest site; nest building; anxiety calls; recently used nest.

³ Evidence: Adult carrying food or faecal sac; adult sitting on nest; nest with eggs/young; egg shells found away from nest; recently fledged young.

Mammal survey

Jean Wood of ASTRA say that residents feed foxes every night. She says they used to see hedgehogs and badgers, but don't any longer. She speaks of seeing bats flying at night.

Remains were found of small mammals - probably rodents.

Evaluation

Because the grassland is unmanaged, the percentage of coarse rank grasses will continue to increase at the expense of the acid grassland. In 1987, common bent, *agrostis capillaris* dominated the grassland. Now the acid grassland is limited to seams running down the hillside along former field boundaries and to some of the southern slopes. Even though this acid grassland is species poor, ie contains few flowering herbs, it is worth preserving.

A management plan is needed for the woodland. Access to western mature woodland should be improved. Some of the dead wood should be removed.

The belt of shrubs and trees along Carwood Close need to be pruned back so that branches do not overhang road. Residents are complaining that hoods of their cars are scratched by branches hanging low when they are heavy with snow.

Japanese knotweed is considered to be an invasive species. Steps should be taken to check the spread of this noxious ruderal.

The problem of fly tipping needs to be addressed.

Sheffield City Council should continue to turn down planning applications for new housing on Carwood Close / Grimesthorpe Road.

Protective actions:

- Continue to block any proposals to build housing on upper slope
- Do not allow factories to annex any property
- Cut rank grass and remove cuttings to reduce fertilility of soil
- Removal of some of the Japanese knotweed
- · Actively discourage fly tipping

Potential improvements:

- Clear sight line along Carwood Close
- Introduce woodland management plan

Species found

A (tree or shrub)

Acer pseudoplatanussycamoreBetula pendulasilver birchBuddleja davidiibutterfly-bush

Corylus avellana hazel

Cotoneaster franchetii

Cotoneaster horizontalis wall spray
Cotoneaster sp. cotoneaster
Cytisus scoparius broom

Fallopia japonica Japanese knotweed

Hedera helixivyIlex aquifoliumhollyLigustrum vulgarewild privet

Lycium barbarum Duke of Argyll's tea-tree

Prunus laurocerasuscherry laurelPrunus spinosablackthornQuercus petraeasessile oak

Quercus sp. oak

Ribes sanguineum flowering currant

Rosa canina agg. dog rose
Rosa rugosa Japanese rose

Rosa sp.roseRubus fruticosus agg.brambleSalix capraeagoat willowSambucus nigraelder

Sambucus nigra 'Aurea' golden leaved elder

Sorbus aucuparia rowan

Sorbus intermedia agg Swedish whitebeam

Syringa vulgaris lilac Tilia x vulgaris lime

B (herb)

Achillea millefoliumyarrowAnthriscus sylvestriscow parsleyAquilegia vulgariscolumbineArtemisia absinthiumwormwoodArtemisia vulgarismugwortBellis perennisdaisy

Calystegia silvatica large bindweed Capsella bursa-pastoris shepherd's-purse Cardamine hirsuta hairy bitter-cress Centaurea nigra common knapweed Chamerion angustifolium rosebay willowherb creeping thistle Cirsium arvense spear thistle Cirsium vulgare Digitalis purpurea foxglov

Foeniculum vulgare fennel
Galium aparine cleavers

cranesbill Geranium sp. Heracleum sphondylium hogweed Hieracium pilosella mouse-ear hawkweed Hieracium umbellatum leafy hawkweed Hyacinthoides hispanica Spanish bluebell Hyacinthoides non-scripta bluebell Hypochaeris radicata cat's-ear Lepidium draba hoary cress Linaria purpurea purple toadflax Lunaria annua honesty black medick Medicago lupulina Melilotus altissima tall melilot Myosotis sp. forget-me-not cultivar Narcissus Division 2 daffodil cultivars Papaver rhoeas common poppy Papaver somniferum opium poppy Plantago lanceolata ribwort plantain Ranunculus repens creeping buttercup sheeps sorrel Rumex acetosella Rumex crispus curled dock common ragwort Senecio jacobaea Senecio squalidus Oxford ragwort Senecio vulgaris groundsel Solanum dulcamara bittersweet Sonchus oleraceus smooth sow-thistle Stachys sylvatica hedge woundwort Symphtum officinale common comfrey Tanacetum parthenium feverfew

C (grass)

Agrostis capillaris
Alopecurus pratensis
Anthoxanthum odoratum
Arrhenatherum elatius
Dactylis glomerata
Deschampsia flexuosa
Elytrigia repens
Holcus lanatus
Holcus mollis
Lolium perenne
Poa annua
Poa trivialis

Taraxacum officianale agg.

Tragopogon pratensis agg.

Trifolium repens Tussilago farfara

Urtica dioica

Vicia sepium

E (Pteridophyte)

Dryopteris filix-mas Pteridium aquilinum common bent
meadow foxtail
sweet vernal-grass
false oat-grass
cock's-foot
wavy hair-grass
common couch
Yorkshire fog
creeping soft-grass
perennial rye-grass
annual meadow-grass
rough meadow-grass

dandelion

goatsbeard white clover

colt's-foot

bush vetch

common nettle

male-fern bracken

F (bryophyte)

Polytrichum commune

Habitats/species of nature conservation importance

UK BAP Priority Habitats

Dry acid grassland

Sheffield LBAP Priority Habitats

Grassland

UK BAP Priority Species

Bullfinch

Song thrush

Sheffield LBAP Priority Species

House sparrow

Song thrush

UK BAP Species of Conservation Concern

Blackcap

Blue tit

Chiffchaff

Common whitethroat

Dunnock

Goldfinch

Great tit

Wren

UK Red List Birds

Bullfinch

House sparrow

Song thrush (three territories)

UK Amber List Birds

Dunnock

Mistle thrush

Local Red Data Book species

Lepidoptera Grade A species

Comma

Holly blue

Speckled wood

Previous surveys

AUTHOR/RECORDER	DATE	COVERAGE	LOCATION
J. Fox	05/08/87	Sheffield Habitat Survey	File 8E30
		Inner City Phase 1	Site 133
		Vegetation types	SK368 897
Sorby NHS	07/07/97	Flora list	SK361 899
			SK363 897
Sorby NHS	14/08/97	Additions to flora list	SK3689

History and Geology

Geological survey

The solid geology of the site lies within the Lower Coal Measures of the Upper carboniferous period and is characterised by mudstone and flaggy sandstone.

Archaeological survey

Two large houses, Woodhill House and Meadow Head (OS 41 and OS 42 respectively), are shown towards the northern extent of Wood Hill on the 1st edition Ordnance Sutvey 6"map (1855). The gardens associated with these properties can clearly be seen. Although Woodhill House has since been destroyed, both gardens and Meadow Head survive to the present day.

Historical survey

Despite the rapid expansion of residential and commercial property in the Burngreave area, Wood Hill has remained largely undeveloped. It is shown as agricultural land on Harrison's map of Southall Soake (1637) and corresponds to three plots of land labelled as *Ferneley*, *Over Wheate Cliffe* and *Wheate Cliffe*. The boundaries of these plots remain largely unchanged to the present day, however two houses with gardens are shown along Occupation Road (now Grimesthorpe Road) on the 1st edition Ordnance Survey 6" map (1855).

Recommendations

Wood Hill is of limited archaeological or historical significance. Despite the rapid expansion of Burngreave from the late nineteenth century, the site has remained undeveloped and is considered to have little or no interpretative potential. Consultation of census records, however, will help identify former residents of Meadow Head and Woodhill House.

Notes by ecologists

1637 map (reconstructed by Scurfield + Medley)

Smith's field is shown as two fields 'Fferneley' and 'Wheate Cliffe'

1790 map (reconstructed by Scurfield + Medley)

Smith's field is shown as two fields called 'Femy Ley' and 'Wheatley'

1850 1:2500 OS map

Wood Hill House marked. The path across middle looks more like a lane, with walls and trees either side.

1905 1:2500 OS map

Wood Hill House has extensive gardens along top of the slope. Smith's Field has scattered trees – looks more like parkland. There are also some steep inclines marked, but there is no sign of quarrying.

1923 1:2500 OS map

Wood Hill House is shown as a collection of buildings fronting on to Grimesthorpe Road. Small glasshouses and garden/field towards southwestern end. A footpath crosses Smith's Field from Grimesthorpe Road to Cyclops Street following the line of the existing bank.

Smith's Field was used as an 18th century militia training ground.

At the base of factories they used to break up old slag from steel mills for road building.

According to an article by Albert Jackson in Issue 36 November 2003 of the <u>Burngreave Messenger</u>, just prior to World War II a barrage balloon unit was stationed on Smith's Field.

Community

The Burngreave Green Environment Programme Roadshow received the following suggestions for Wood Hill:

Comments/ Suggestions	Number
Cricket	1
Dog free zone	1
Motorbike Track	1
Pond	1
Football Pitch	1