

Management Brief 2014 to 2019: Pinkham Way Borough Grade 1 Site of Importance for Nature Conservation

For: Pinkham Way Alliance



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**Denis J Vickers BSc(Hons), FLS, CBiol., MBS, MCIEEM
Consultant Ecologist/Chartered Biologist**



Mobile: 07888677730

E-mail: denis@consultantecologist.co.uk

Web: <http://consultantecologist.co.uk>

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1. Introduction

Background

- 1.1 There was in 2011 a proposal to construct a waste plant and refuse vehicle depot at the Pinkham Way Site of Importance for Nature Conservation (SINC) (the site of the Former Friern Barnet Sewage Works) in the London Borough of Haringey, London N11 3UT. The joint planning application for these proposals, from the NLWA and Barnet Council, was withdrawn in April 2013. The local community is opposed to such development and in response formed a campaign group - the Pinkham Way Alliance (PWA) - in 2011. PWA was recently invited by the London Borough of Haringey (LBH) Cabinet Member for Planning and Enforcement to visit the site, together with senior borough planners and representatives of the NLWA as site owners, so that he could gain a sense, on the ground, of the arguments put forward by PWA. Turleys Consultants have prepared the main PWA submission. In view of the Ecological Report commissioned by the PWA in 2013, which confirmed the site's status as a Grade 1 SINC, as well as highlighting significant habitats, the Alliance also felt it appropriate to submit an outline Site Management Plan, detailing steps and a programme of work to protect the nature conservation value of the site. PWA has asked a) its own supporters and b) other local residents, through groups such as Residents' Associations etc, whether in principle they would be prepared to commit themselves to a couple of hours regular supervised practical help on the site, perhaps on a monthly basis.

Site location and context

- 1.2 The site is situated in the London Borough of Haringey. It is approximately 6.8 hectares (ha) in size and the National Grid Reference for the centre of the site is TQ288916. The site is bounded to the north by the North Circular Road (A406) and to the south is Muswell Hill Golf Course/Bluebell Wood which is designated as a SINC and Metropolitan Open Land. Hollickwood Park (also a SINC) lies immediately west of the site. A railway line and cutting that demarcates the eastern boundary forms part of a designated ecological corridor. The surrounding area is urbanised, comprising residential properties and associated gardens to the west of the site, Bounds Green Industrial Estate on the eastern side of the railway line and the Friern Bridge Retail Park on the northern side of the North Circular Road.
- 1.3 Historically the site was a sewage treatment works that was operational until 1963. It was then used for landfill by the London Borough of Barnet (LBB) up until 1980. Since

this time, the site has been left derelict and has become naturally colonised by secondary woodland, scrub, ruderal vegetation and rough grassland. The only evidence of past use as a sewage works is some vestigial foundations, which PWA estimates form between 1% and 2% of the total site area. These are partially covered in vegetation. Otherwise during the recent visit, no further evidence of that past use, in the form either of remnants of buildings or of hardstanding, could be discerned by anyone present. There is evidence of more recent disturbance associated with its use as a landfill site, the construction of the Pegasus Way Roundabout and illegal fly tipping (including abandoned and burnt out vehicles), which are still evident at the site although mostly buried in vegetation.

- 1.4 The site was wholly owned by the London Borough of Barnet (LBB) up until 2009 when LBB sold part of the site to the North London Waste Authority (NLWA), whilst still retaining ownership of the other part. The site is not in active use and management is currently limited to the mandatory control of invasive species; giant hogweed and Japanese knotweed and tree management works. There is no public access to the site.

Development proposals

- 1.5 A number of outline proposals for the site have been made over the past 15 years, including housing and bulk retail. Any NLWA proposals were linked to the procurement of a waste contract, which the Authority abandoned in September 2013. During the recent visit, NLWA officers told the Haringey Cabinet Member for Planning and Enforcement that the Authority had no short or medium term plans for the site. Barnet Council's proposals were withdrawn in April 2013; PWA understands from a recent answer to a local ward councillor from the Barnet Cabinet Member concerned that the Council is presently undecided whether to renew them.

The need for management

- 1.6 The biodiversity value of the 'Wasteland' habitat at the site is of nature conservation value and the site was designated a Borough Grade I SINC (Haringey Council, 2009). A Preliminary Ecological Assessment was commissioned by the PWA and undertaken in 2013 by Pearce & Vickers. This (and other recent surveys) confirms that the site continues to support habitats that are characteristic 'Wasteland', a broad habitat type of significance under the Haringey Biodiversity Action Plan (BAP), a London Priority Habitat 'Wasteland' (London BAP) and UK Priority Habitat Open Mosaic Habitat on

Previously Developed Land (UK BAP). The site has high biodiversity value within the context of the local area and therefore continues to qualify as a Borough Grade I SINC. However, management in the form of rotational clearance of woodland and scrub, infrequent cutting of tall ruderal vegetation and rough grassland, and the creation of scrapes to expose areas of bare ground and wet depressions is required to maintain and enhance the biodiversity interest of the site in the long-term.

2. Site description

2.1 The site is divided into three compartments on the basis of habitats present. A description of each compartment is provided below and a map is presented in Appendix 1. This is based on the Preliminary Ecological Assessment undertaken in 2013 by Pearce & Vickers.

Compartment 1: Woodland and scrub

- 2.2 The central and eastern parts of the site supports secondary woodland and scrub which accounts for approximately 60 % (4 ha) of the total site area. This comprises a mixture of mature and semi-mature sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior* with occasional apple *Malus domestica*, crab apple *Malus sylvestris* and wild cherry *Prunus avium* and a dense scrub understorey of blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna* and bramble *Rubus fruticosus* agg with occasional elder *Sambucus nigra* and dog rose *Rosa canina*. Ivy *Hedera helix* is also prevalent.
- 2.3 Along the woodland edges, paths and clearings, a variety of herbaceous species occur: notably stinging nettle *Urtica dioica*, cleavers *Galium aparine*, creeping cinquefoil *Potentilla reptans*, rosebay willowherb *Chamerion angustifolia*, great willowherb *Epilobium hirsutum*, cow parsley *Anthriscus sylvestris*, garlic mustard *Alliaria petiolata*, goat's rue *Galega officinalis* and wood avens *Geum urbanum*; and grasses: creeping bent *Agrostis stolonifera*, false oat grass *Arrhenatherum elatius*, Yorkshire fog *Holcus lanatus*, wood meadow-grass *Poa nemoralis* and cock's-foot *Dactylis glomerata*. Hairy sedge *Carex hirta* and pendulous sedge *C. pendula* are present within a clearing in the north-eastern part of the site suggesting that this area holds water for at least part of the year.
- 2.4 Large mature tree species are mostly present at the boundaries of the site. At the southern boundary is line of mature Lombardy poplars *Populus nigra* 'Italic' (located at

the boundary of the adjacent golf course) and several mature oaks *Quercus robur*. The eastern and western boundaries are dominated by willow *Salix* sp. and hybrid black poplars *Populus x canadensis*. Mature oaks, ash and poplars occur along the northern boundary and a number of these trees are likely to be remnants of ancient woodland habitat.

- 2.5 There is evidence of recent control of the invasive species giant hogweed and Japanese knotweed from within the woodland. A small stand of Japanese knotweed is present at the northern end of the western boundary.

Compartment 2: Rough grassland and disturbed ground

- 2.6 The north-western part of the site is more open and supports rough grassland comprising rough meadow-grass *Poa trivialis*, cock's foot, creeping bent, barren brome *Anisantha sterilis*, false oat-grass, and Yorkshire fog as well as common bent *Agrostis capillaris* and smooth meadow-grass *Poa pratensis*. Herbaceous species become increasingly abundant on areas of higher ground and include Michaelmas daisy, *Aster* sp., black medick *Medicago lupulina*, wild carrot *Daucus carota*, yarrow *Achillea millefolium*, nipplewort *Lapsana communis*, ribwort plantain *Plantago lanceolata*, oxeye daisy *Leucanthemum vulgare*, common vetch *Vicia sativa*, common mouse-ear *Cerastium fontanum*, bristly oxtongue *Helminthotheca echioides*, hawkweed oxtongue *Picris hieracoides*, white clover *Trifolium repens* and goat's-rue. Bare ground occurs in more disturbed areas, particularly near to the entrance of the site. Characteristic pioneer species of disturbed ground such as common mallow *Malva sylvestris*, barren brome, bristly oxtongue, prickly sow-thistle *Sonchus asper* and common ragwort *Senecio jacobaea* are present within and at the periphery of these areas.

Compartment 3: Tall Herb vegetation

- 2.7 The south-western part of the site supports tall herb vegetation often dominated by sometimes segregated stands of comfrey *Symphytum x uplandicum* and cow parsley. Other tall herbs include frequent wild carrot, teasel *Dipsacus fullonum* creeping thistle *Cirsium arvense*, hoary mustard *Hirschfeldia incana*, common ragwort, St John's-wort *Hypericum perforatum*, cat's-ear *Hypochaeris radicator*, and stinging nettle, together with creeping bent, false oat grass, cock's-foot, couch grass *Elytrigia repens* and barren brome. Bramble at the southern boundary of the site is encroaching onto this habitat, and several saplings of oak, ash and silver birch *Betula pendula* are also present.

3. Important features on site

3.1 A number of locally important features were identified in the Preliminary Ecological Assessment undertaken in 2013 (Pearce & Vickers) which are crucial to the management of this site:

Mature trees

3.2 A number of mature Lombardy poplars *Populus nigra 'Italica'* and oaks *Quercus robur* occur at the boundary of the site (Figure 2, T2), many of which support cavity features suitable for nesting birds and roosting bats. Some oaks are of possible antiquity.

Secondary woodland and scrub

3.3 The secondary woodland and scrub of the site with its sycamore, ash, apple, blackthorn and hawthorn and other trees and shrubs is of local significance in Haringey and supports a variety of birds and invertebrates. Woodland is a London and Haringey LBAP habitat.

Dead wood

3.4 Dead wood of all types, but particularly standing is a valuable habitat and asset for a variety of fauna. Woodpeckers, nuthatch and treecreeper, which occur in the general locality, are often dependent on this resource for foraging and nesting. Additionally, a variety of insects are associated with dead wood and many species of fungi are completely dependent upon it. This habitat is often lost, particularly in urban areas, when sites are tidied up.

Ivy

3.5 Ivy is a valuable resource during the autumn and winter months, providing a late source of nectar for insects, and foraging and shelter for birds at a time of year when deciduous trees are dormant. It is a common misconception that a covering of ivy somehow harms the trunks and branches of trees; consequently it is sometimes cut-back or otherwise removed by well-meaning people.

Transitional areas and disturbed ground

3.6 Wet depressions (Figure 2, T5) and areas of disturbed ground (see Figure 2) offer shelter, foraging and basking sites for invertebrates and reptiles. Transitional vegetation and areas of disturbed ground in the north-western part of the site provide suitable habitat for common invertebrates. Caterpillars of UK BAP Priority Species Cinnabar moth were also

recorded. It is possible that other notable invertebrate species occur within these habitats and a comprehensive invertebrate survey is recommended

Reptiles

3.7 Slow worm occur at the site (Figure 2, T3) and transitional vegetation, areas of disturbed ground and wet depressions offer potential habitat for other reptiles such as grass snake.

Birds

3.8 The site is used as a breeding site by no less than six notable bird species (UK BAP Priority Species or RSPB Red or Amber Status) (Pearce & Vickers 2013, Arup 2011). It also provides breeding and foraging habitat for a diversity of widespread and common bird species.

Bats

3.9 Mature trees at the boundary of the site have the potential to support roosting bats (Figure 2, T2). An early record for common pipistrelle *Pipistrellus pipistrellus* before sunset suggests a roost may occur on site. The site also provides foraging and commuting habitat for common pipistrelle and noctule *Nyctalus noctula* bats (Pearce & Vickers 2013, Arup 2011, Jacobs 2009). Higher levels of bat activity at the southern and western boundaries of the site suggest that these habitats offer a flight line between the adjacent Muswell Hill Golf Course and Hollickwood Park.

Invasive species

3.10 Giant hogweed *Heracleum mantegazzianum* and Japanese knotweed *Fallopia japonica* (Figure 2, T1) were identified on site, but there was evidence of on-going control of these invasive species.

4. Aims and Objectives

4.1 Management should:

- reflect species and habitat targets set in the UK and local BAPs
- maintain and enhance the general qualities of existing habitats whilst re-establishing others, appropriate to the site
- improve the understanding of the site's flora and fauna in order to refine management practices in the future

4.2 This should be achieved via:-

- a) Maintaining woodland/scrub habitat for its biological interest, and regular and systematic coppicing of native shrubs to:
 - Improve structure of woodland/scrub areas
 - Encourage and enhance the area's biodiversity, particularly regarding insects, bats and birds
- b) Maintaining and re-establishing wasteland BAP habitat of local, regional and national significance in order to:
 - Increase microhabitats present and niches available for associated fauna but particularly invertebrates e.g. Hymenoptera
- c) Continuing control/eradication of invading weeds listed under Schedule 9 of the Wildlife & Countryside Act 1981 (& amendments)
- d) Ensuring an adequate quantity of dead wood microhabitats, both standing and fallen
- e) Maintaining health of mature trees particularly at the site boundary, some of which may be a relict of ancient woodland, as well as providing potential roosting sites for bats and nesting sites for birds

- f) Maintaining ivy-clad trees and banks wherever it is safe to do so – the survey by Pearce & Vickers 2013 suggested this might be a possible location for bat roosts on site
- g) Increasing the number of potential bird nesting and bat roosting sites present
- i) Providing hibernacula suitable for slow worms and hedgehogs by retaining piles of logs and brush, leaves and other vegetation in more secluded parts of the site
- h) Assessing the invertebrate interest as it is likely that the habitats present (particularly wasteland) support a diversity of invertebrate species
- i) Improving on site safety and develop interpretation (leaflets, reports and papers) to facilitate biological recording and, if possible, controlled access to the site at a later date

5. Management prescription

Recommended Action

Compartment 1: Woodland and scrub (area ~ 4 ha)

- a) Generally, woodland trees will be maintained via non-intervention over the period of the management plan except in the case of health and safety concerns. However, staggered coppicing of native understorey shrubs should proceed as required. This will improve woodland structure. Timber and brash removed should be stacked in piles together with any natural debris. The burning of brashings must not be conducted on site. All tree and scrub removal work should be undertaken between November and February. The aim should be to coppice half the area of shrubs over the five year period of this management brief (i.e. 10% per year).

Seasonally wet depressions should not be used for depositing cuttings and brashings removed from other parts of the site and should be occasionally cleared of leaf-litter and other organic materials.

Compartment 2: Rough grassland and areas of disturbed ground (area ~0.8 ha)

- b) A late summer cutting regime shall be adopted for this compartment's grassland and tall herb vegetation with the entire area strimmed in late summer (August-September).

Cuttings should be left on the ground for 3-5 days and then gathered up and taken to more secluded parts of the site where it can be built into habitat piles. This mowing regime will remove invading scrub and trees and encourage floral diversity by lowering the organic matter returning to the soil and allowing for seed/invertebrate dispersal pre and post mowing.

The area of this compartment covered in wasteland is approximately 0.25 ha (i.e. 2,500 m²). This could be increased by approximately 5-10% (125 – 250 m²) per year by shallowly rotovating adjacent grassland areas within the compartment to create additional areas of disturbed ground. These will be recolonised by pioneer plant species and invertebrates. Autumn is possibly the optimum time of year for this to take place. Turfs should be gathered up and taken to more secluded parts of the site where they can be built into habitat piles.

Compartment 3: Tall herb (ruderal) vegetation (area ~ 2.0 ha)

- c) Approximately 5 to 10% (1,000 - 2,000 m²) of this area should be strimmed and pulled when in flower (before going to seed): cow parsley in April; comfrey in May-June. The aim is to clear a different area each year but this will be open to revision subject to the ease and effectiveness of the action. Pulling is very labour intensive but will produce niches in the soil for invertebrates and when completely uprooted, will not regrow. Depending on the resources available, a combination of strimming with some pulling is the most likely scenario. Cuttings should be gathered up and placed in piles within the cleared area.

Hedgehogs

- d) As hedgehogs might be found on site due care should be taken during vegetation clearance works. Any leaf or log piles should ideally be cleared by hand and all materials should be kept on site to provide potential nesting and hibernation sites. In summer hedgehogs often nest in long grass, so care should also be taken during strimming or mowing activities associated with the clearance of rough grassland and tall ruderal vegetation.

Compartment 1: dead wood

- e) This should remain on site within wooded areas. Standing dead wood (e.g. monoliths) must be considered where safe to retain. Smaller logs should be stacked in habitat piles whilst larger trunks and branches can remain *in situ*.

Compartment 1: mature trees

- f) Mature trees at the site's boundary (some of which could be ancient in character) and which offer potential roost sites for bats and suitable nest sites for birds should be retained wherever possible. If tree removal/surgery becomes necessary because of health and safety concerns, the mitigation advice given in the report by Pearce & Vickers, 2013 should be enacted as a number of these boundary features support cavity features of high/medium potential to support bat roosts.

Compartment 1: Ivy

- g) Ivy should not be cut-back or cleared from banks or trees unless it can be demonstrated that it is likely to cause instability during windy conditions which may lead to tree fall and pose a health & safety issue. Ivy clad trees within the main area of woodland offer potential roost sites for single or low numbers of bats. If ivy is required to be removed

the mitigation advice regarding bat roosts given in the report by Pearce & Vickers, 2013 should be enacted.

Invasive weeds

- h) Continuing control/eradication of invading weeds listed under Schedule 9 of the Wildlife & Countryside Act 1981 (& amendments) is advised.

Bird and bat boxes

- i) Bat boxes could be erected onto any mature trees at the boundary of the site. Schwegler 1 FF boxes, which have an open bottom and therefore require less management, are recommended. Bat boxes should be installed at between 2 and 5 metres above ground level and unobstructed by foliage to ensure a clear bat entry/exit path. They should be located away from artificial lighting. Any artificial roost sites should ideally be monitored annually by a suitably qualified bat ecologist and this data should be made available to the local records centre.

In order to minimise competition of use of bat boxes by nesting birds, it is also recommended that bird boxes are erected alongside bat boxes (Meddings et al 2011). Bird boxes should cater for London BAP species such as starling, song thrush and spotted flycatcher.

Site safety and access

- j) The access from Pegasus Way could be facilitated by building steps over the perimeter bund and the chief on-site desire lines broadened to 1.2 m by regular strimming. The possibility of allowing occasional but controlled public access should be considered e.g. vegetation management work days by PWA, biological recording and guided walks.

Wildlife monitoring

- k) [Compartments 1, 2 and 3] Local wildlife experts should be encouraged to undertake regular biological surveying (particularly invertebrates) and monitoring. The discovery of important species might have a bearing on the future execution of this management plan which should be revised accordingly. Records should be passed on to Greenspace Information for Greater London (GiGL).

6. Five-Year Management Plan: Schedule and Summary of Projects

Comp.	Project	Priority	Notes	Year	Timing	Para.
1	Woodland maintenance	1	Non-intervention except for health & safety	1 to 5	As required	4a
		2	Coppicing understorey	2 & 4	Nov-Feb	
		3	Clearance of seasonally wet depressions	1 to 5	As required	
2	Rough grassland & disturbed ground maintenance	1	Strimming grassland & tall herbs	1 to 5	Late Aug to early Sept	4b
		1	Rotovating wastland	1 to 5	Autumn	
3	Tall herb management	1	strimming/pulling	1 to 5	April to June	4c
1, 2 & 3	Hedgehogs	1	Caution clearing vegetation	1 to 5	Ongoing	4d
1	Retaining dead wood	2		1 to 5	as required	4e
1	Mature trees maintenance	1		1 to 5	As required	4f
1	Retaining ivy	1		1 to 5	As required	4g
1, 2 & 3	Treatment of invasive species	1		1 to 5	As required	4f
1	Installation of bird & bat boxes	3	Bat boxes	3	Winter	4i
			Bird boxes	3	Winter	
1,2 & 3	Improving site safety & access	3		2 to 5	Winter	4j
1,2 & 3	Wildlife monitoring	2		1 to 5	Ongoing	4k

7. References

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Appendix 1 Maps

Figure 1: Management Compartments

Figure 2: Target Notes and features of importance

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Figure 1: Management Compartments

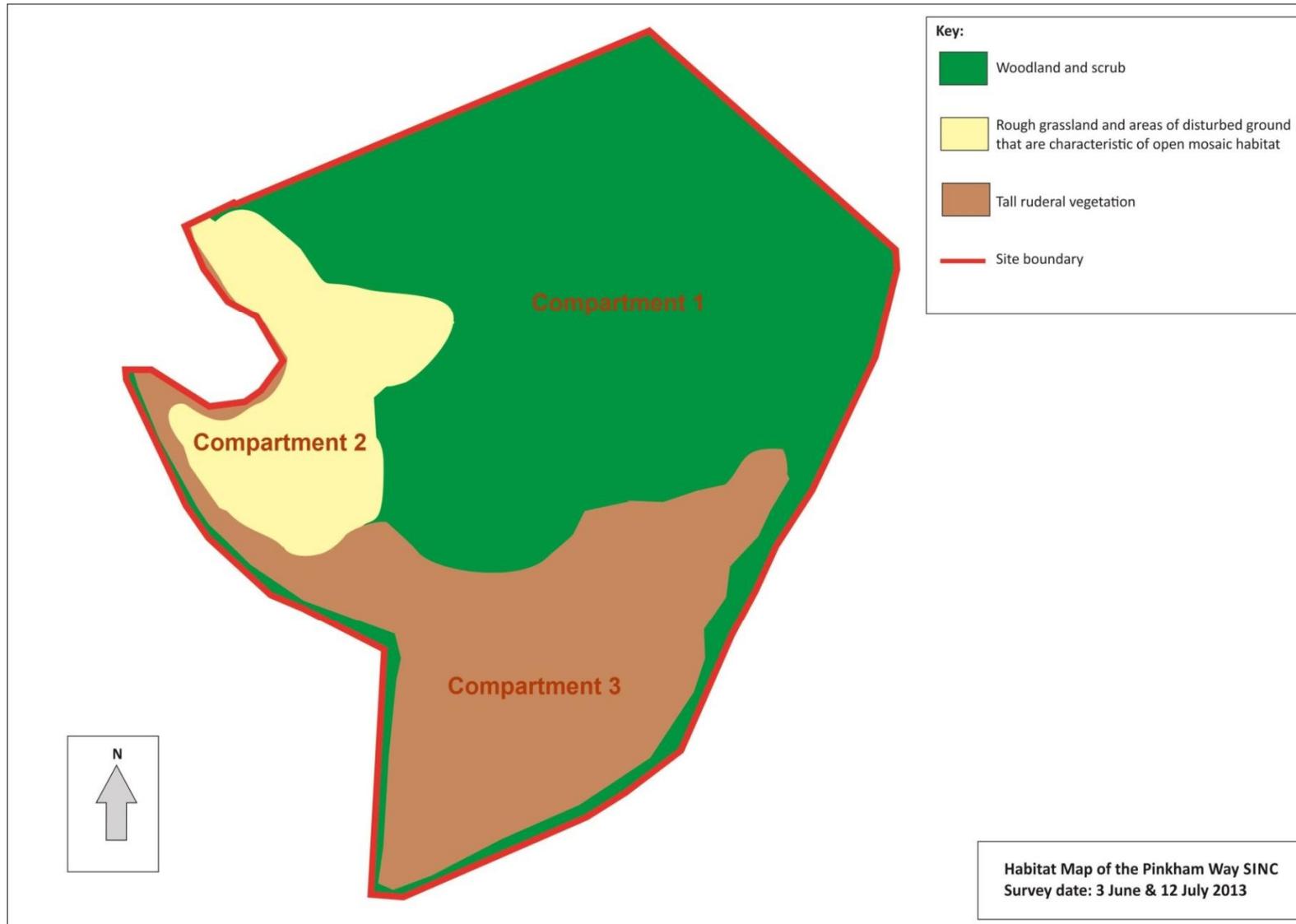
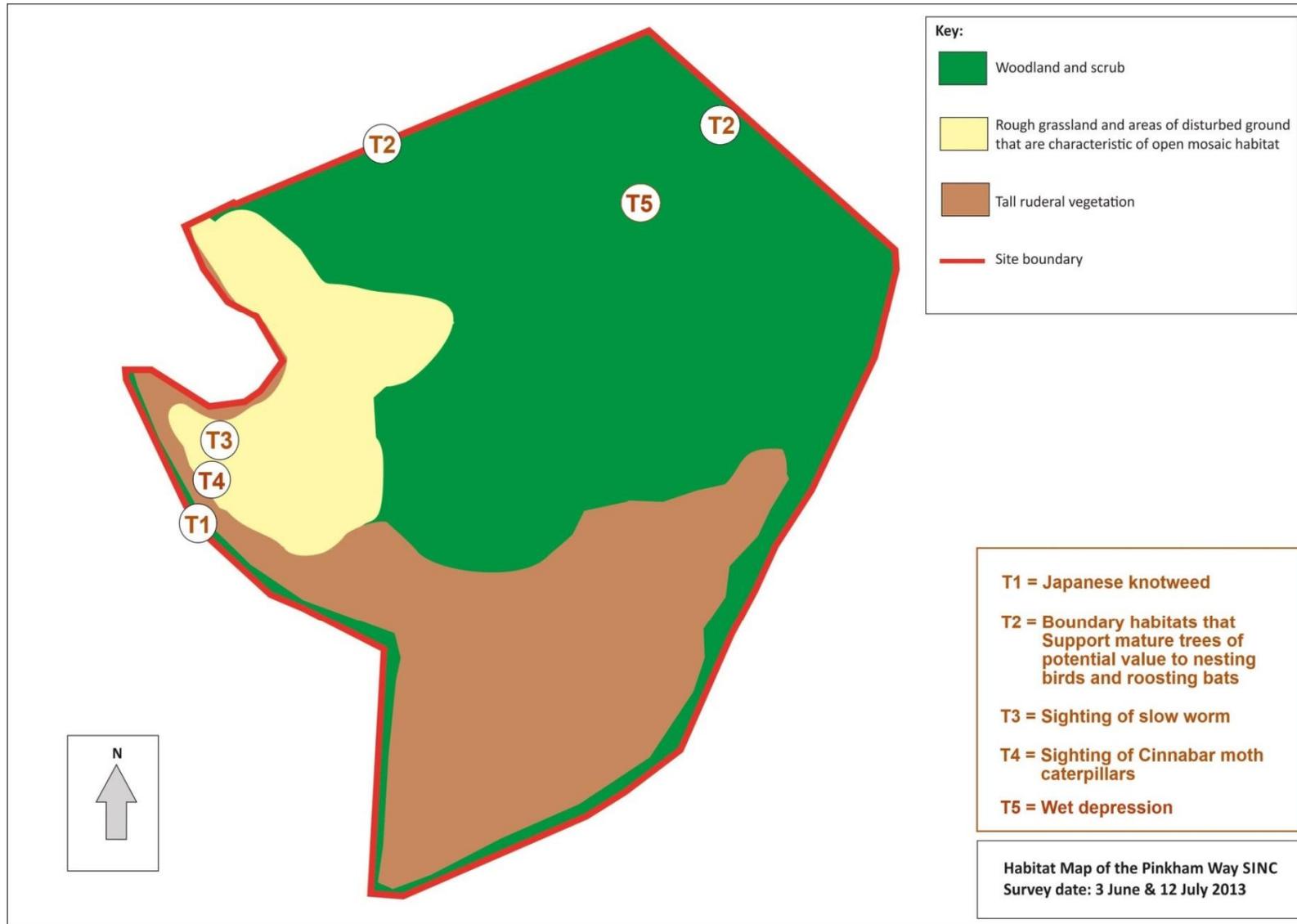


Figure 2: Target Notes and features of importance



Appendix 2 Species lists from 2013 survey

Appendix 2a: Vascular plant species recorded on site on the 3rd June and 12th July 2013

Appendix 2b: Bird species recorded on site on the 3rd June and 12th July 2013

Appendix 2c: Other species recorded on site on the 3rd June and 12th July 2013

Appendix 2a:

Vascular plant species recorded on site on the 3rd June and 12th July 2013

VASCULA PLANTS	Common name	DAFOR	Qualifiers
<i>Acer pseudoplatanus</i>	Sycamore	O	S, T
<i>Achillea millefolium</i>	Yarrow	O	
<i>Aesculus hippocastanum</i>	Horse-chestnut	O	T, Y
<i>Agrostis capillaris</i>	Common Bent	O	
<i>Agrostis stolonifera</i>	Creeping Bent	F	W
<i>Alliaria petiolata</i>	Garlic Mustard	O	
<i>Anisantha sterilis</i>	Barren Brome	F	
<i>Anthriscus sylvestris</i>	Cow Parsley	D	
<i>Antirrhinum majus</i>	Common Snapdragon	R	E
<i>Arctium minus</i>	Lesser Burdock	R	
<i>Armoracia rusticana</i>	Horse-radish	O	
<i>Arrhenatherum elatius</i>	False Oat-grass	F	
<i>Artemisia vulgaris</i>	Mugwort	O	
<i>Aster</i> sp.	Michaelmas Daisy	F	
<i>Ballota nigra</i>	Black Horehound	O	
<i>Bellis perennis</i>	Daisy	R	
<i>Betula pendula</i>	Silver Birch	F	S, Y
<i>Brassica rapa</i>	Field Mustard	O	
<i>Bromus hordeaceus</i>	Soft Brome	F	
<i>Bryonia dioica</i>	White Bryony	R	
<i>Buddleja davidii</i>	Buddleia	O	
<i>Calystegia sepium</i>	Hedge Bindweed	O	
<i>Cardamine flexuosa</i>	Wavy Bittercress	O	
<i>Carex hirta</i>	Hairy Sedge	O	W
<i>Carex pendula</i>	Pendulous Sedge	R	W
<i>Cerastium fontanum</i>	Common Mouse-ear	O	
<i>Chamerion angustifolia</i>	Rosebay Willowherb	O	
<i>Cirsium arvense</i>	Creeping thistle	F	
<i>Conium maculatum</i>	Hemlock	O	
<i>Cornus sanguinea</i>	Common Dogwood	R	
<i>Corylus avellana</i>	Hazel	O	S
<i>Crataegus monogyna</i>	Hawthorn	O	
<i>Crepis capillaris</i>	Smooth Hawksbeard	R	
<i>Crepis vesicaria</i>	Beaked Hawkbeard	O	
<i>Dactylis glomerata</i>	Cock's-foot	F	
<i>Daucus carota</i>	Wild Carrot	F	
<i>Dipsacus fullonum</i>	Teasel	O	
<i>Elytrigia repens</i>	Couch-grass	F	
<i>Epilobium hirsutum</i>	Great Willowherb	O	
<i>Euphorbia helioscopia</i>	Sun Spurge	R	
<i>Fallopia japonica</i>	Japanese Knotweed	O	
<i>Festuca arundinacea</i>	Tall Fescue	R	
<i>Festuca rubra</i>	Red Fescue	F	
<i>Foeniculum vulgare</i>	Fennel	R	
<i>Fraxinus anomala</i>	Single-leaved Ash	R	T
<i>Fraxinus excelsior</i>	Common Ash	O	S, Y, T

VASCULA PLANTS	Common name	DAFOR	Qualifiers
<i>Galega officinalis</i>	Goat's-rue	O	
<i>Galium aparine</i>	Cleavers	F	W
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill	F	
<i>Geranium robertianum</i>	Herb Robert	O	
<i>Geum urbanum</i>	Wood Avens/Herb Bennet	O	
<i>Glechoma hederacea</i>	Ground Ivy	O	
<i>Hedera helix</i>	Ivy	O	
<i>Helminthotheca echioides</i>	Bristly Oxtongue	O	
<i>Heracleum mantegazzianum</i>	Giant Hogweed	O	C
<i>Heracleum spondylium</i>	Hogweed	O	
<i>Hirschfeldia incana</i>	Hoary Mustard	O	
<i>Holcus lanatus</i>	Yorkshire Fog	F	
<i>Hypericum perforatum</i>	St. John's-wort	F	
<i>Hypochaeris radicator</i>	Cat's-ear	O	
<i>Juncus inflexus</i>	Soft Rush	O	C
<i>Laburnum anagyroides</i>	Common Laburnum	R	Y
<i>Lactuca serriola</i>	Prickly Lettuce	R	
<i>Lamium album</i>	White Dead-nettle	R	
<i>Lapsana communis</i>	Nipplewort	O	
<i>Lathyrus latifolius</i>	Broad-leaved Everlasting-pea	R	
<i>Lepidium draba</i>	Hoary Cress	F	
<i>Leucanthemum vulgare</i>	Oxeye-daisy	O	
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	R	
<i>Malus pumila</i>	Apple	O	Y
<i>Malus x purpurea</i>	Crab apple	O	T
<i>Malva sylvestris</i>	Common Mallow	R	
<i>Matricaria chamomilla</i>	Scented Mayweed	O	
<i>Medicago lupulina</i>	Black Medick	A	
<i>Melilotus officinalis</i>	Common Melilot	O	
<i>Myosotis scorpiodes</i>	Forget-me-not	R	
<i>Pentaglottis sempervirens</i>	Green Alkanet	R	
<i>Picris hieracoides</i>	Hawkweed Oxtongue	O	
<i>Plantago lanceolata</i>	Ribwort Plantain	O	
<i>Poa nemoralis</i>	Wood Meadow-grass	O	E
<i>Poa pratensis</i>	Smooth Meadow-grass	O	
<i>Poa trivialis</i>	Rough Meadow-grass	A	
<i>Populus x canadensis</i>	Hybrid Black Poplar	O	E, T
<i>Potentilla reptans</i>	Creeping Cinquefoil	A	
<i>Prunus avium</i>	Wild Cherry/Gean	R	S
<i>Prunus cerasifera pissadii</i>	Pissard or Purple Plum	R	
<i>Prunus spinosa</i>	Blackthorn	O	Y
<i>Quercus robur</i>	Pedunculate Oak	O	Y, T, E
<i>Ranunculus repens</i>	Creeping Buttercup	F	
<i>Robinia pseudoacacia</i>	False Acacia	R	E, Y, T
<i>Rosa canina</i>	Dog Rose	O	
<i>Rubus fruticosus</i> agg.	Bramble	D	
<i>Rumex conglomeratus</i>	Clustered Dock	R	
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O	
<i>Salix caprea</i>	Goat Willow	O	T, Y
<i>Salix cinerea</i>	Grey Willow	O	Y

VASCULA PLANTS	Common name	DAFOR	Qualifiers
<i>Salix fragilis</i>	Crack Willow	O	T, Y
<i>Sambucus nigra</i>	Elder	O	E
<i>Senecio erucifolius</i>	Hoary Ragwort	R	
<i>Senecio jacobaea</i>	Common Ragwort	F	
<i>Silene latifolia</i>	White Campion	O	
<i>Sonchus asper</i>	Prickly Sow-thistle	R	
<i>Sorbus intermedia</i>	Swedish Whitebeam	R	E, T
<i>Stachys sylvatica</i>	Hedge Woundwort	O	C
<i>Symphoricarpus albus</i>	Snowberry	R	
<i>Symphytum x uplandicum</i>	Comfrey	D	
<i>Taraxacum</i> sp.	Dandelion	O	
<i>Trifolium campestre</i>	Hop Trefoil	O	
<i>Trifolium pratense</i>	Red Clover	R	
<i>Trifolium repens</i>	White Clover	F	
<i>Urtica dioica</i>	Stinging Nettle	F	
<i>Veronica chamaedrys</i>	Germander Speedwell	R	
<i>Vicia sativa</i>	Common Vetch	O	

DAFOR Scale:

D=Dominant
A=Abundant
F=Frequent
O=Occasional
R=Rare

Qualifiers:

E=Edge
M=Mature tree
S=Sapling
Y=Young tree
W=Wet area

Appendix 2b:

Bird species recorded on site on the 3rd June and 12th July 2013

Species	Common Name	Breeding	RSPB	UK BAP Priority Species
<i>Turdus merula</i>	Blackbird	*	Green	
<i>Sylvia atricapilla</i>	Blackcap	*	Green	
<i>Cyanistes caeruleus</i>	Blue tit		Green	
<i>Corvus corone</i>	Carrion crow		Green	
<i>Phylloscopus collybita</i>	Chiffchaff	*	Green	
<i>Columba livia</i>	Feral pigeon			
<i>Parus major</i>	Great tit		Green	
<i>Carduelis chloris</i>	Greenfinch	*	Green	
<i>Sylvia curruca</i>	Lesser Whitethroat	*	Green	
<i>Pica pica</i>	Magpie		Green	
<i>Erithacus rubecula</i>	Robin		Green	
<i>Turdus philomelos</i>	Song thrush	*	Red	*
<i>Apus apus</i>	Swift		Amber	
<i>Columba palumbus</i>	Woodpigeon		Green	
<i>Sylvia communis</i>	Whitethroat	*	Amber	
<i>Troglodytes troglodytes</i>	Wren	*	Green	

Appendix 2c:

Other species recorded on site on the 3rd June and 12th July 2013

Species Group	Species	Common name	Species of Principal Importance
Butterflies	<i>Anthocharis cardamines</i>	Orange tip	
	<i>Inachis io</i>	Peacock	
	<i>Pieris rapae</i>	Small White	
	<i>Maniola jurtina</i>	Meadow brown	
	<i>Aglais urticae</i>	Small tortoiseshell	
	<i>Thymelicus sylvestris</i>	Small skipper	
Moths	<i>Tyria jacobaeae</i>	Cinnabar moth caterpillars (See Appendix 1, Figure 2 ; T4)	*
Dragonflies	<i>Libellula depressa</i>	Broad bodied chaser	
Reptiles	<i>Anguis fragilis</i>	Slow worm (Under reptile felt at TQ287915) (See Appendix 1, Figure 2 ; T3)	*
Mammals	<i>Vulpes vulpes</i>	Fox	
	<i>Pipistrellus pipistrellus</i>	Common pipistrelle	