

**Biodiversity Duty:
Phase 1 Habitat Survey of
Collections Centre, Nantgarw**



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Introduction

Biodiversity is a core component of sustainable development, underpinning economic development and prosperity, and has an important role to play in developing locally distinctive and sustainable communities. From 1 October 2006, all public authorities in England and Wales have a Duty to have regard to the conservation of biodiversity in exercising their functions. The Duty aims to raise the profile and visibility of biodiversity, clarify existing commitments with regard to biodiversity, and to make it a natural and integral part of policy and decision making. The Duty is set out in Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006 which states: *“Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”*.

A part of the museum's response to the legislation, biodiversity audits are being carried out at its sites. In this report, a Phase 1 habitat survey of the Collections Centre at Nantgarw is presented. The Phase 1 habitat survey technique is the standard system for classifying and mapping wildlife habitats (including urban areas) in Britain (Nature Conservancy Council 1989; Wyatt 1991). The aim of the survey is to provide information about the nature, location and extent of semi-natural habitats to direct decision making and conservation effort effectively. Sites are mapped reasonably rapidly by visiting each parcel of land and mapping the vegetation, usually at the scale of 1:10,000, according to about ninety specific habitat types using standard colour codes. More detailed notes ("target notes") are made on areas of interest. The surveys can then be used to determine areas for more detailed survey, to indicate areas of value for nature conservation, and to provide a simple baseline for monitoring change in the future.

Methods

The site was visited on 6 April 2009 in dry but dull weather, and mapped following the survey manual (Nature Conservancy Council 1989). The area surveyed is shown in red in Figure 1; the scale is larger than normal for Phase 1 due to the small size of the site.

Results

All habitats on this site are artificial, with planted trees, shrubberies, mown grass, and rough weedy vegetation developed over made ground. The following habitats were present and are mapped in Figure 1:

A.2.2 Scattered Scrub (Figures 1, 3)

There is scattered scrub in the form of bramble patches and butterfly bush scrub, especially along the fences, and with young butterfly bush developing on the barer ground. There are occasional young willow trees and cotoneasters spread by birds. A few gorse bushes occur in the NW corner.

One patch of hawthorn, possibly planted, occurs on the grassland along the south side.

A.3.1 Broad-leaved parkland/scattered trees (Figures 1, 5, 6, 7)

There are planted trees (ash, green alder, birch) around the site.

B.1.2.2 Semi-improved, neutral grassland (Figures 1, 4)

The rank grassland along the north side of the building is probably best treated in this category, rather than marshy grassland despite the rushes. It is secondary in origin and relatively species-poor.

J.1.2 Amenity grassland (Figures 1, 5, 6, 7)

The mown grassland around the site is relatively species-rich, developed over landscaped clayey soils.

J.1.3 Ephemeral/short perennial (Figures 1, 2, 3)

The areas at the back of the museum with artefacts developed over made ground, and the short open vegetation on the north side is short perennial vegetation with weedy species.

J.1.4 Introduced shrub (Figures 1, 6, 7)

There are planted shrubberies at the front of the museum with species such as cherry laurel and cotoneaster.

J.2.4 Fence (Figure 1)

Most of the site is fenced with a 2m tall security fence (sometimes with barbed wire).

Figure 1. Phase 1 habitat survey of Collections Centre grounds, April 2009.

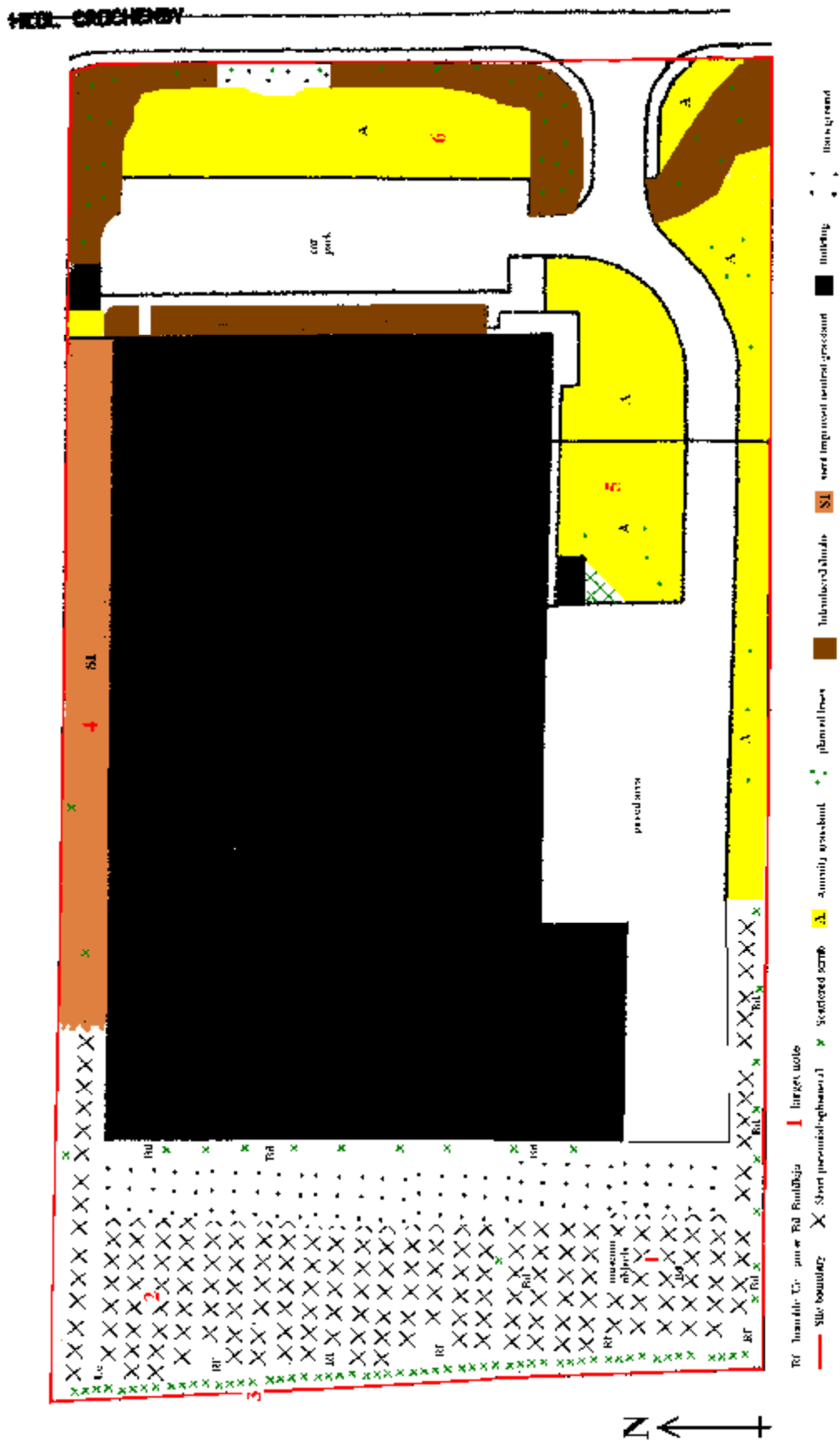




Figure 2. Area with museum artefacts in SW corner of site (Target note 1).



Figure 3. Area of made ground in NW corner of site (Target note 2) with scrub along fence



Figure 4. Area along north side of building (Target note 4)



Figure 5. Grassland area on south side (Target note 5)



Figure 6. Front entrance area (Target note 6), looking east



Figure 7. Front car park area (Target note 6), looking south with amenity grassland, planted shrubs and a flower bed.

Target Notes (Figure 1)

1. Area at SW corner of grounds (Figures 1, 2)
Made ground at rear of museum, used in part for storage of museum industrial artefacts. Stony base, occasional weeds, 90% bare ground between objects. Main weeds present are butterfly bush, willowherb, thistle, ragwort.
2. Area at NW corner of grounds (Figures 1, 3)
Grassy/moss area grazed by rabbits, with some damp patches, on made ground, 90% vegetation cover. Main species present are hard rush, ragwort, moss, creeping bent, spear thistle.
3. Security fence (Figure 1)
2 m high metal fence around site. Brambles, butterfly bush and occasionally gorse along west and south sides, clearer along north side.
4. North side of building (Figures 1, 4)
A narrow strip c. 8 m wide along the north side of the building, with rank vegetation 30-130 cm tall, 100% cover. Main species present are false oat-grass, docks, ragwort, pendulous sedge, wild parsnip, hard rush. Occasional willows and butterfly bush colonising. Rat control measures in place.
5. South side of building (Figures 1, 5)
Mown grassland with a few planted trees (alder, acer) and small clump of hawthorn. Grassland quite rich and mossy, with violets, woodrush, yarrow, daisy, self-heal, white clover, red clover, ox-eye daisy, etc.
6. Front car park area (Figures 1, 6, 7)
An area of mown amenity grassland by car park with shrubberies and planted trees. Grassland area pretty much same as the South Side (area 5) with abundant woodrush, creeping buttercup, moss, white clover, etc. One bare area of flower bed with a few weeds (evening primrose, thale cress). Planted daffodils in grass on SE side of building.

Other information

Staff on site report rabbits, bats flying past, and green woodpeckers using the grassland, and area 5 had an orchid species present in the grass in past years.

Discussion

The habitats around the Collections Centre are all artificial in origin and of low intrinsic nature conservation interest. There is some limited potential to manage them to enhance biodiversity.

The mown grasslands are reasonably diverse and have the potential to be developed as hay meadows by allowing the grass to grow longer and then be cut from mid-summer onwards with the cuttings removed.

The grassland in the narrow strip along the north side of the building requires cutting at least once a year to maintain diversity, it is currently quite rank.

Butterfly bush saplings have spread quite extensively across the made ground at the east end of the site and may require control.

References

- Nature Conservancy Council (1990). *Handbook for Phase 1 habitat survey - a technique for environmental audit*. England Field Unit, Nature Conservancy Council, Peterborough.
- Wyatt, G. (1991). *A review of Phase 1 habitat survey in England*. England Field Unit, Nature Conservancy Council, Peterborough.