For

Goldsmiths, University of London,



New Cross Campus and Loring Sports Ground

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Biodiversity Management Strategy

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1 INTRODUCTION

1.1 Location of Site

This strategy covers 2 geographical locations, the New Cross Campus (referred to as "the Campus" and the Loring Sports Ground (referred to as "the sports ground")

Site 1: New Cross Campus

The New Cross Campus is situated between the railway and New Cross railway station to the west to Lewisham Way to the east. New Cross represents the northern boundary of the campus and St. Donatt's Road to the south at Ordnance Survey OS Grid TQ36447676 at the centre (college green) of the site at postcode SE14 6NR.

The campus site is set predominantly within an urban setting with 'built habitat' dominant with isolated occasional greenspace habitat dispersed within the built areas. The built environment consists of modern and period architecture which includes:

The former Royal Naval School, built in 1843 and a grade 1 listed building; Nineteen Edwardian period terraced houses that are used for office and administrative purposes;

Deptford Town Hall building, a Victorian Bath House and Sat James Hatcham Church built around the same era; and an assortment of approximentely fifteen post 1950's period buildings for academic studies.

The greenspace is predominantly amenity grassland which is dominated by the college green and horticultural planted beds and borders. (Rodwell J.S. 1998) and J3.2 (JNCC 2010).

Adjacent to the western boundary is the railway embankment which contains deciduous broadleaf trees forming approximately 820m of linear green arboreal corridor running from New Cross Road in the north to Endwell Road in the south.

This corridor does have limited connectivity to St. James Hall, Barriedale buildings, and the Lockwood annex. (Rodwell J.S. 1998) and J3.2 (JNCC 2010).

Site 2 Loring Sports Ground

The Loring Sports Ground (Stable Meadow Sports Ground) is accessed from North Cray Road DA14 5ES on the A223 at Ordnance Survey Grid reference OS TQ48647242 and is set within a suburban mosaic range of habitats. The amenity grassland playing fields dominate the site and the built environment is limited and located in the south eastern corner of the site and a hard surface tennis court in the south western corner of the site.

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The sports ground is surrounded by chain link fencing supported by concrete post. This fence is found in a mixed state of repair. Beyond the fence and surrounding the boundary of the site lies broadleaf deciduous mixed and planted secondary woodland.

Beyond the woodland along the western boundary lies a community allotment and to the north Wyncham Stream runs east to west along the sites' northern boundary.

Loring Hall is outside the boundary of the sports ground site but is a period building which may have on effect on faunal use of the site (especially bats and birds). There are however three buildings within the boundary, of which the principle is the sports hall with attached changing rooms which are both in disrepair. Adjacent to these buildings are the garages and office.

All buildings appear to be brick built 1950-60's in design. The main sport hall has a traditional pitched roof with slate tiles. The other buildings appear to have flat roof construction with felt and bitumen clad rooves.

1.2 Ecology Background

There have been very limited formal ecological and environmental surveys carried out on the site. Appendix 2 is a comprehensive redord of all Ecological and Environmental Surveys that have been recorded on the site.

The appendix shall be updated on an annual basis.

1.3 Purpose of Document

This Biodiversity Management Strategy has been prepared in order to document the following:

To provide a framework for the recognition and protection of key habitats and species that are present within the asset

To document the specific actions required to monitor the frequency and dispersion of key species and expanse of key habitats within the asset

To set and targets for enhancement and development and to establist performance indicators against them.

To record ecological enhancements to the asset.

To provide a framework for action to allow a comprehensive 5 year Biodiversity Management Strategy to be developed.

2 **BIODIVERSITY FEATURES AND DRIVERS**

2.1 Habitats

The New Cross Campus has 4 habitats deemed to be important for the biodiversity of the site, of which Deciduous woodland and scrub habitat are considered to be Priority Habitats within the UK Biodiversity Action Plans and are listed on Section 41 of the NERC Act: Habitats of Principal Importance in England. These are:

- Deciduous Woodland
- Scrub
- Urban Horticulture
- Amenity Grassland

The Sports Ground has 3 habitats deemed to be important for the biodiversity of the site, of which deciduous woodland and boundary habitats are considered to be Priority Habitats within the UK Biodiversity Action Plans and are listed on Section 41 of the NERC Act: Habitats of Principal Importance in England. These are:

- Amenity Grassland
- Deciduous Woodland
- Boundary Habitat

Habitat maps are provided in Appendix 1

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Decidious Woodland

Legislation	The Wildlife and Countryside Act 1981 (as ammended) Environmental Protection Act 1990 The Conservation of Habitats and Species Regulations 2017 The Environmental Permitting Regulations 1999
Relevant BAPs	Species dependant for all or part life cycles on single and/or groups of trees
Relevant BAP Objectives	Survey and monitor at the appropriate time of year for presence of species.
Goldsmiths BAP Reference	Maintain condition of existing tree stock to ensure good development and safety
High Value Features (in the context of the site) to be protected	Trees either individually and or as a group of trees provide a place of food, shelter or place of rest for many species; Trees also provide visual wellbeing to students, staff and reduces pollution levels.
Low Value Features (in the context of the site) to be enhanced	Trees need enhancement from a mainly safety, practical management and health perspective.

2.2

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2.3

Legislation	The Wildlife and Countryside Act 1981 (as ammended) Environmental Protection Act 1990
	The Conservation of Habitats and Species Regulations 2017
	The Environmental Permitting Regulations 1999
Relevant BAPs	Species dependant for all or part life cycles on single and/or groups of trees
Relevant BAP Objectives	Survey and monitor at the appropriate time of year for presence of species.
Goldsmiths BAP	Formally measure, survey and record the habitat
Reference	Produce a longer term management strategy
High Value	Scrub either in isolation and or as a shelter belt of scrub
Features (in the	provide a place of food, shelter or place of rest for many
context of the	species;
site) to be	
protected	
Low Value	Scrub needs enhancement from a mainly safety, practical
Features (in the	management and health perspective.
context of the	
site) to be	
enhanced	

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2.4

Horticulture

Legislation	None
Relevant BAPs	None
Relevant BAP Objectives	None
Goldsmiths BAP Reference	Formally measure, survey and record the habitat Develop horticulture strategy; Create horticultural "hot spots" with different focus on different species; Aim to select native species of plants where possible and select plant species which provides food and shelter throughout the year.
High Value Features (in the context of the site) to be protected	None
Low Value Features (in the context of the site) to be enhanced	None

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Amenity Grassland

2.5

Legislation	None
Relevant BAPs	None
Relevant BAP Objectives	None
Goldsmiths BAP	Designate different zones of grassland:-
Reference	- manicured lawns
	- wildflower meadows & natural meadows
	Increase the percentage of meadows against lawns
High Value Features (in the context of the site) to be protected	None
Low Value Features (in the context of the site) to be enhanced	Cutting should consider set-a-side of margins to encourage a broader diversity of species. Adopt a 'one cut' strategy in late autumn.

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Boundary Habitat		
Legislation	The Wildlife and Countryside Act 1981 Environmental Protection Act 1990 The Conservation of Habitats and Species Regulations 2017 The Environmental Permitting Regulations 1999	
Relevant BAPs	Bats will use linear features like boundary habitats for navigation, feeding and foraging.	
Relevant BAP	Maintain habitats through regular cutting outside bird nesting	
Objectives	season (March-September).	
Goldsmiths BAP Reference	Maintain and Enhance habitat	
High Value Features (in the context of the site) to be protected	Habitat which has clear connectivity to deciduous woodland	
Low Value Features (in the context of the site) to be enhanced	Gaps in habitat should be filled by planting during the winter months (November-February).	

Boundary Habitat

2.7 Wildlife

The preliminary ecological appraisal undertaken in October 2019 and subsequent surveying visits have confirmed the presence of a range of species on site:

25 species of bird	(3 BoCC: Red; 4 BoCC: Amber, 4 UKBAP; 3 KRDB; 3 LRDB)
9 species of mammal	(None are protected or notable)
3 species of butterfly	(None are protected or notable)

Abbreviations:

2.6

KRDB	= Kent Red Data Book listed species
LRDB	= London Red Dat Book listed species
BoCC	= Birds of Conservation Concern

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UKBAP = United Kingdom Biodiversity Action Plan listed species

In addition to this there is circumstantial evidence of hedgehogs and bats within the site.

The following key wildlife have been identified for the site within the scope of this strategy

Species / Class	Legislation	Relevant National or Local BAP Objectives
Bats	Wildlife and Countryside Act 1981 The Conservation of	WCA Schedule 5 which is superceded by the The Conservation (Natural Habitats and Species) Regulations 2017.
	Habitats and Species Regulations 2017; s.41	UKBAP_P: A priority listed species.
	NERC Act.	Goldsmiths BAP:
		Establish presence / absence of bat population
		Enhance suitability of habitat to encourage population settlement and growth
Hedgehogs	Wildlife and Countryside Act 1981 As amended	Establish size of populations of hedgehog.
Reptiles and	Wildlife and	Establish presence / absence of population
Amphibians	Countryside Act 1981 The Conservation of Habitats and Species Regulations 2017; s.41 NERC Act.	Enhance suitability of habitat to encourage population settlement and growth
Birds	Wildlife and Countryside Act 1981	Maintain and enhance a diverse population of Birds at Goldsmiths by ensuring that habitats are protected and managed appropriately
		Enhance suitability of habitat to encourage population settlement and growth
Insects	Wildlife and Countryside Act 1981 as amended	Undertake insect surveys to establish species variations and size

3 **BIODIVERSITY OBJECTIVES**

3.1 Strategy Objectives

The objectives of this Biodiversity Management Strategy are to:

Enhance the site for biodiversity with emphasis on habitats and species where relevant National, Regional and Local BAP's exist.

Outline the management measures required in the short and long-term to maximise the biodiversity value of the site

Protect existing features of biodiversity during routine and non-routine maintenance operations Manage the population of invasive species to minimise their impact on the asset and ensure legal compliance

3.2	Specific Objectives : Habitats
3.2.1	Specific Objectives: Deciduous Woodland
	Maintain condition of existing tree stock to ensure good development and safety
3.2.2	Specific Objectives: Urban Scrub
	Formally measure, survey and record the habitat Produce a longer term management strategy
3.2.3	Specific Objectives: Horticulture
	Formally measure, survey and record the habitat Develop horticulture strategy Create horticultural "hot spots" with different focus on different species
3.2.4	Specific Objectives: Amenity Grassland
	Designate different zones of grassland

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Increase the percentage of meadows against lawns

3.2.5 Specific Objectives: Boundary Habitat

Maintain and Enhance habitat

3.3 Specific Objectives: Wildlife

3.3.1 Specific Objectives: Mammals

Establish size of populations of hedgehog Establish presence / absence of bat population Enhance suitability of habitat to encourage population settlement and growth

3.3.2 Specific Objectives: Reptiles and Amphibians

Establish presence / absence of population Enhance suitability of habitat to encourage population settlement and growth

3.3.3 Specific Objectives: Birds

Maintain and enhance a diverse population of Birds at Goldsmiths by ensuring that habitats are protected and managed appropriately Enhance suitability of habitat to encourage population settlement and growth

3.3.4 Specific Objectives: Insects

Undertake insect surveys to establish species variations and size.

3.4 Specific Objectives: Invasives

3.4.1 Specific Objectives: Invasive Plants

Eradicate the population of Japanese Knotweed from the site Have in place a robust mechanism for the identification of and subsequent removal of any invasive plant on the site.

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4 **BIODIVERSITY STRATEGY DETAIL**

4.1 Habitats

4.1.1 Deciduous Woodland

Specific Objectives

Maintain condition of existing tree stock to ensure good development and safety

TARGET: Undertake and publish a formal tree survey for the site

A detailed tree survey will be undertaken by the grounds maintenance team supported by the ecologists. The tree survey will identify works required to the tree stock to ensure that they are safe and growing in suitable manner. Works will be classified as red, amber and green to ensure that immediate safety and critical maintenance activities are prioritised.

4.1.2 Urban Scrub

Specific Objectives: Urban Scrub

Formally measure, survey and record the habitat Produce a longer term management strategy

TARGET: Improve access to the habitat area TARGET: Undertake small scale enhancements to quality of habitat TARGET: Develop connectivity to external key habitat

The access to the habitat area will be improved by the removal of items and plant material that is blocking access and posing a risk to staff

The current habitats will be formally measured and surveyed in detail and items of dead plant growth and refuga that are not positively contributing to the habitat will be removed

The surveys will take place on a seasonal basis to ensure that all seasonal variations are are fully appraised

The railway embankment to the west of the campus represents a key local habitat and connectivility to this habitat from the campus will be developed and consolidated

4.1.3 Horticulture

Specific Objectives: Horticulture Formally measure, survey and record the habitat Develop horticulture strategy Create horticultural "hot spots" with different focus on different species

> TARGET: Create horticulture map of campus TARGET: Remove dead and inappropriate plants TARGET: Create horticultural hot spots with different identities TARGET: Disseminate information to raise awareness of horticulture strategy

The grounds maintenance manager will prepare an annual maintenance plan for the campus;

The grounds maintenance manager will develop themed beds, borders and horticultural zones to increase diversity and support different species of fauna as identified in surveys and to support the future development of the estate; Establish an area which includes storage, maintenance and nursery facilities for ground maintenance.

4.1.4 Amenity Grassland

Specific Objectives: Amenity Grassland

Designate different zones of grassland Increase the percentage of meadows against lawns

TARGET: Measure and map amenity grassland TARGET: Create meadows within existing amenity footprint TARGET: Disseminate information to raise awareness of grassland strategy

The grounds maintenance manager will prepare an annual grass cutting plan for the campus;

Identify and establish wild flower meadow areas within the campus;

Develop marginal/boundary wildlife grassland areas within amenity areas grassland areas to develop short and long grass sward habitat; and

Establish a 'one cut' seasonal removal of these marginal areas in late Autumn and remove all cuttings.

4.1.5 Boundary Habitat

Specific Objectives: Boundary Habitat Maintain and enhance the habitat

TARGET: Measure and record the habitat TARGET: Increase the habitat area by 20%

The grounds maintenance manager will prepare an annual maintenance plan for the campus;

Identify areas where boundary habitats can be linked together in association with deciduous woodland habitats through the campus.

4.2 Wildlife

4.2.1 Mammals

Specific Objectives: Mammals

Establish size of populations of hedgehog Establish presence / absence of bat population Enhance suitability of habitat to encourage population settlement and growth

TARGET: Undertake Hedgehog monitoring program TARGET: Undertake Comprehensive Bat Surveys TARGET: Enhance habitats to allow for expansion of key species population

Hedgehog surveys will be undertaken in April, July and August; Hedgehog enhancements will be installed at locations designed to encourage the hog population to flourish on campus;

Bat emergence and re-entry surveys will be undertaken in April, June and July "Hot Spots" of Bat activity will be monitored by the installation of fixed bat recorders for long term monitoring and recording of activity;

An annual report of Bat activity will be submitted as evidence to support target Enhancements will be installed on an annual basis to encourage and support a wider range of bats at the asset;

The enhancements will be installed at locations designed to encourage the

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bat population to roost away from the buildings, tunnels and potential development locations; and General mammal surveys will be undertaken in September to establish presence of other mammal species.

4.2.2 Reptiles and Amphibians

Specific Objectives: Reptiles and Amphibians

Establish presence / absence of population Enhance suitability of habitat to encourage population settlement and growth

TARGET: Install and survey Artificial Cover Objects across the site TARGET: Develop a habitat management plan to support any species that have been identified

Artificial cover objects will be installed in March which will then be monitored on a monthly basis until September and the frequency and distribution of key species will be recorded and mapped.

A summary report will be produced which will recommend enhancements and hibernacula that can be installed to enhance and maintain the populations of target species.

Any remedial works or scrub clearance will be programmed to be undertaken within the winter program

4.2.3 Birds

Specific Objectives: Birds

Maintain and enhance a diverse population of Birds at Goldsmiths by ensuring that habitats are protected and managed appropriately Enhance suitability of habitat to encourage population settlement and growth

TARGET: Monitor and record species populations on an annual basis TARGET: Ensure that any habitat works are indertaken in an appropriate manner to enhance and not jeapordise the population

All bird species will be monitored throughout the year and sightings recorded as well as evidence of breeding and locations of nesting areas.

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The nesting areas and specific habitats relevant to the species will be monitored. Any works being undertaken that have the potential to impact on the species or their habitat will require the approval of an environmental impact assessment. Enhancements will be installed on an annual basis to encourage and support a wider range of birds in the asset

4.2.4 Insects

Specific Objectives: Insects

Undertake insect surveys to establish species variations and size

TARGET: Monitor and record species populations on an annual basis TARGET: Install enhancements to support a diverse population of insects

Invertebrate surveys will be carried out at key positions throughout the campus. Surveys will include: net sweeping, moth trapping, sugar/nectar traps and visual observation transects, these will be conducted in the summer months (March to September)

Install three bug hotels at key points throughout the site; and Install three solitary bee houses at Key points throughout the site.

4.3 Invasives

4.3.1 Invasive Plants

Specific Objectives: Invasive Plants

Eradicate the population of Japanese Knotweed from the site Have in place a robust mechanism for the identification of and subsequent removal of any invasive plant on the site

TARGET: Aggressivley treat Japanese Knotweed in known areas on an ongoing basis TARGET: Present annual action plans for Invasive Plant Management

The known area of Japanese Knotweed will be treated on a **monthly** basis by the grounds maintenance contractor between April and September and any new growth will be removed and disposed of in accordance with best practice.

The known area of Japanese Knotweed will be treated by the grounds maintenance contractor between April and September using hand removal and or natural predator methods.

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An Annual Action Plan will be presented that will include:

- Detailed Mapping of areas of known invasive plant growth
- Records of all treatments undertaken in the previous year

5 ROLES AND RESPONSIBILITIES

5.1

Director of Estates and Facilities

The Director of Estates and Facilities will be responsible for the storage and distribution of the Biodiversity Management Strategy The Director of Estates and Facilities will be responsible for ensuring the practical implementation of the Biodiversity Management Strategy

5.2 ISO Coordinator

The *ISO Coordinator* will be responsible for coordinating the actual implementation of the Biodiversity Management Strategy The *ISO Coordinator* will be responsible for principle liaision between the environmental enhancement working group, the environmental consultant and the grounds maintenance team

Grounds Maintenance Manager

The Grounds Maintenance Manager will be responsible for the direct implementation of the physical aspects of the Biodiversoty Management Strategy The Grounds Maintenance Manager will be responsible for ensuring that any habitat works are indertaken in accordance with the strategy

5.4

5.3

Environmental Consultants / Ecologists

The Environmental Consultant will be responsible for the monitoring and compilation of baseline ecological data and the production of each of the management plans. The environmental Consultant will be responsible for the training and guidance of key environmental hosts

The environmental consultant will carry out watching briefs and attend call outs as appropriate where events and incidents pose a risk to wildlife or their habitats. The environmental consultant will be responsible for preparing maps and standard survey paperwork.

6 **R**EFERENCES

Emery M. (1986) Promoting Nature in Cities and Towns Croom Helm London GiGL (2020) Desktop Data Search (13890) Greenspace Information for Greater London Kent Biodiversity Action Plan London Biodiversity Action Plan London Invasive Species Intiative (LISI)

7 LIST OF APPENDIXES

Appendix 1Habitat MapsAppendix 2List of Ecological and Environmental SurveysAppendix 3Legal Register, Legislation Explanation and Species ProtectionAppendix 4Detailed Species ListsAppendix 5Biodiversity Action Plans