Biodiversity Action Plan 2020 - 2023

Author: Zanda Pipira
Date: 4 February 2020
+44 020 7133 3307
z.pipira@londonmet.ac.uk

1. Biodiversity at London Metropolitan University

The University is located across two main sites in central London, which mainly consist of buildings and limited outside spaces.

North Campus is located in the heart of Islington which is characterised by housing and other development, leaving little space for biodiversity in the form of wildlife habitat and green spaces. However the University is to and within easy reach of green spaces such as Highbury Fields, Paradise Park and Drayton Park.

City Campus has very little space comparing to the North Campus and park Altab Ali is the only park within easy reach from the University's Aldgate buildings.

Work has been undertaken to increase biodiversity at the university. There are wide range of projects and initiatives already in place such as increased biodiversity with the project 'Big Dig' in the main courtyard, seasonal bulb planting events, gardening club, planting new palm trees, and the installation of two roof gardens in both university campuses with a variety of plants and vegetables. The past 5 years have seen significant improvements relating to the environment particularly in terms of practical action.

We recognise that our operations have the potential to impact on biodiversity both directly and indirectly and that we have a responsibility to manage these impacts.
Biodiversity Action Plan supports both - The Biodiversity Policy and the University's Environmental Sustainability Strategy to ensure we identify, maintain and enhance biodiversity across our campuses and that construction, refurbishment or maintenance of the estate improves biodiversity as well as the air quality and does not have a negative impact on existing habitats.

1.1. Aldgate Campus

Aldgate Campus roof garden including Wash Houses have total of 353m^2 of green space.
The key biodiversity features of the site include:

- A variety of borders and shrubs
- Birds, bees invertebrates, butterflies and other pollinators

See Appendix 1 and 2 for Calcutta House roof garden map and 25 Old Castle Street, Wash Houses map. Referred areas in this Action Plan for the City Campus are from C1 to C2.

1.2. Holloway Road Campus

London Metropolitan University estate in Holloway Road campus includes 574 m^2 excluding the buildings. Much of the University Holloway Road estate is of minimal wildlife value, consisting mostly of shrubs and wild meadow and that the all wildlife habitats tend to be located at the edges / sides of the Main Courtyard.

The key biodiversity and wildlife features of the sites include:

- Hedges and shrubbery
- Rows of trees
- Tall herbs and grasses
- Water feature
- Wildflower meadow
- Birds, fish, ducks, small mammals, invertebrates, bees and other pollinators

See Appendix 3 and 4 for the Tower Building Main Courtyard and P Block roof Garden. Referred areas in this Action Plan for the North Campus are from T1 to T9.

At present, many of the existing wildlife habitats are situated at the periphery of the North campus, but new habitats could be established strategically so that they encourage wildlife into the heart of the campus, where more people may enjoy it. New habitats could also be designed to act as corridors facilitating the movement of wildlife through the landscape.

The biodiversity resource on campus, including on and near the buildings, can also be enhanced by the provision of artificial structures such as bird boxes, bat boxes, invertebrate shelters and habitat piles.

The University has two roof gardens that encourage people to develop new skills in planting and growing. In the future there is a need to expand to the existing roof garden.
Roof gardens have many advantages such as being a great source of food and roofs also serve as secluded areas for birds and invertebrates to colonise. Other locations should be considered to create greener roofs and green walls to enhance biodiversity. Green walls provide shelter and potential nesting for birds and invertebrates. Additional planters in selective areas and bird feeding stations should also be considered when planning to enhance biodiversity.

1.3. Education and Engagement Opportunities.

The success of this BAP does not only depend upon ecological techniques. It is also important to explain to people the value of biodiversity and attracting wildlife onto University land therefore engaging the wider community and raising awareness is essential. People who work at, or regularly visit, the University have become used to a formal and neat environment. The subtle attractiveness of wildflower meadows, shrubbery and wildlife pond may take a little getting used to, so it is important to explain what is happening and encourage people to participate. One way of developing enthusiasm and support is to capitalize on the established public love of certain wildlife, such as ducks, birds, bees and butterflies. Another approach may be to promote the health and well-being benefits of working in a more natural environment.

The development of a webpage and/or publicity material interpreting the biodiversity of the University and summarizing the BAP would be ways to help people understand and enjoy its nature. The habitats of the University offer a valuable educational resource, and they should continue to be used by staff and students for research. People should be encouraged to submit any observations of new wildlife on University land in the future and participate in conservation activities at University site (e.g. rubbish clearing). Site interpretation using signboards should be considered.

2. Action plans

2.1. Hedges and shrubbery

A large extent of hedges and shrubbery was mapped across the different University campus areas. Hedges and shrubbery not only serve as wildlife habitats in their own right, but can also provide links between sites of wildlife interest both on and off-campus along which species may move (e.g. birds and mammals). Few of the University areas have been planted with exotic shrubs like *Laurus nobilis* that have an aesthetic appeal but may be of limited biodiversity value (T5, T3).
This plan aims to promote hedgerow maintenance to promote biodiversity and expand this important habitat.

Objective: Conserve existing habitats whilst creating new ones.

Actions	Review	How this will be measured
Increase and maintain a dense and complete hedge in some parts of the areas.	Maintain annually and increase by 2023	A shelter is created and act as a potential transport corridor for wildlife.
Introduce more native shrubs.	Introduce by 2023	Diversify the hedge resource with Dogwood or Buckthorn.
Identify areas of grounds where new hedgerow and other wild life corridors can be put into place.	Review annually with any new project if it's possible to increase wildlife corridors.	Areas identified.

2.2. Wetlands

Action Plan aims to promote wetland maintenance to promote biodiversity. Except for an ornamental pond (T8) London Metropolitan University holds no other wetland habitats. Wetlands, such as ponds, not only add to the aesthetic value of the landscape but attract many species, such as amphibians and dragonflies, and also provide a food and water resource for birds and bats. Such pond offers a focal point for wildlife and people.

Objective: Conserve existing habitats

Actions	Review	How this will be measured
Maintain the current pond - ensure that the pond is maintained on annual basis to provide space for fish, small mammals, birds and, pollinators. Undertake annual pond inspection against salmonella, pond free of debris and other rubbish.	Annually during June	This will be measured by duck returning each spring to breed and fish in the pond. Also assessment of cleanness of the pond will be observed.

2.2. Trees

Trees are important for many species of animal, plant and fungi as well as being an important carbon sink.

Objective: Conserve existing habitats whilst creating new ones and improve air quality.

Actions	Review	How this will be measured
Plant additional native trees species which are disease resistant.	2020	Suitable areas where to plant more trees are found and trees are planted.
Maintain mature trees - monitor trees on annual basis as part of the on-going annual biodiversity surveys.	Annually	All mature trees are in good condition, no pests or illnesses that might destroy them are detected.

2.3. Tall herbs and grass

Tall grasses such as bamboo hedging is one of the most extensive habitat at the London Metropolitan University Holloway Campus, usually found in large patches. Survey has identified potential areas (e.g. T4 and T1) where management could be altered to promote higher diversity. By planting the right type of plants we provide a room for honey bees and other pollinators and different habitats for wildlife. Pollination provides food for other wildlife from birds to insects. Royal Horticultural Society has created a pollinators plant list that can be used as a guidance to support existing 2 beehives and other pollinators around the area. Where possible plants are identified by type, season and when plant flowers are rich in nectar and/or pollen, both of which are important to the colony's development. See Royal Horticultural Society website for full list of pollinators.

Objective: Conserve existing habitats whilst creating new ones.

Actions	How this will be measured	Who is Responsible	Status Review
Plant supplementary flora - identify areas and plant more of wildflower mixes and tall grasses.	Sow wild mixes designed to promote birds, bees and butterflies on a number of sites. More diverse pollinator species observed.	Estates grounds management	Annually

2.4. Birds, bees and butterflies

Objective: Conserve existing habitats whilst creating new ones.

Actions	How this will be measured	Who is Responsible	Status Review
Planting flowers and plants in garden beds and increased biodiversity on the roof gardens that encourage conserving existing bees, birds, and butterflies.	Planted bee, bird and butterfly friendly flowers.	Zanda Pipira/Sustainability Team	Annually
Introduce more bird boxes.	More boxes created and installed.	Zanda Pipira/Sustainability Team	Every 3 years
Ensure peregrine falcons undisturbed nesting period to encourage the return yearly.	No access on the Tower Building roof during nesting period (normally March – June)	Paul Ayles/Sustainability team	Annually

2.5. Clean air improvements

Air pollution is not only causing health problems but also causing declines in the quality, quantity and diversity of wildlife habitats and species.

Objective: Reduce air pollution by increasing biodiversity.

Actions	How this will be measured	Who is Responsible	Status Review
Plant various plants and follow above actions.	Monitor nitrogen dioxide, using diffusion tubes or add air pollution monitoring station	Estates grounds management /Sustainability	Annually
Install living walls	Living wall installation	Estates grounds management	2023

2.6. Education and Engagement

Engaging students and staff in Biodiversity is vital in promoting the importance of biodiversity and ensuring that students and staff have an opportunity to enjoy the campuses.

Education and engagement plan will engage students and staff by providing education, training, and encouragement in local initiatives and biodiversity programmes.

Actions	How this will be measured	Who is Responsible	Status Review
Promote green spaces and rooftops across students and staff.	Communications when outdoor spaces are in season to use them.	Zanda Pipira/Sustainability Team	Annually
Run Sustainability spotlight month on Biodiversity with information about green spaces and how they can get involved.	Run a biodiversity themed event and monitor attendance.	Zanda Pipira/Sustainability Team	Annually
Create additional signage and resources in the green spaces about available flora and fauna.	Create a signage.	Zanda Pipira/Sustainability Team	Annually
Identify academic projects that integrate biodiversity into the learning framework to involve students in projects.	Academic projects identified.	Zanda Pipira/Sustainability Team	Annually

3. Summary

Action planning consists of 7 work streams to achieve our Biodiversity Policy Aims for further biodiversity development and these are incorporated into action plan.

1. Target species that can be attracted onto the estate.
2. Create new habitats and food sources to attract the target species.
3. Provide guidance/suggestions for biodiversity improvements in masterplans.
4. Involve students and staff in delivering the improvements.
5. Monitor the interventions.
6. Communicate the benefits and achievements of biodiversity improvements.
7. Identify academic projects that integrate biodiversity into the learning framework.

Action plans must be reviewed annually where applicable.

Appendix 1.

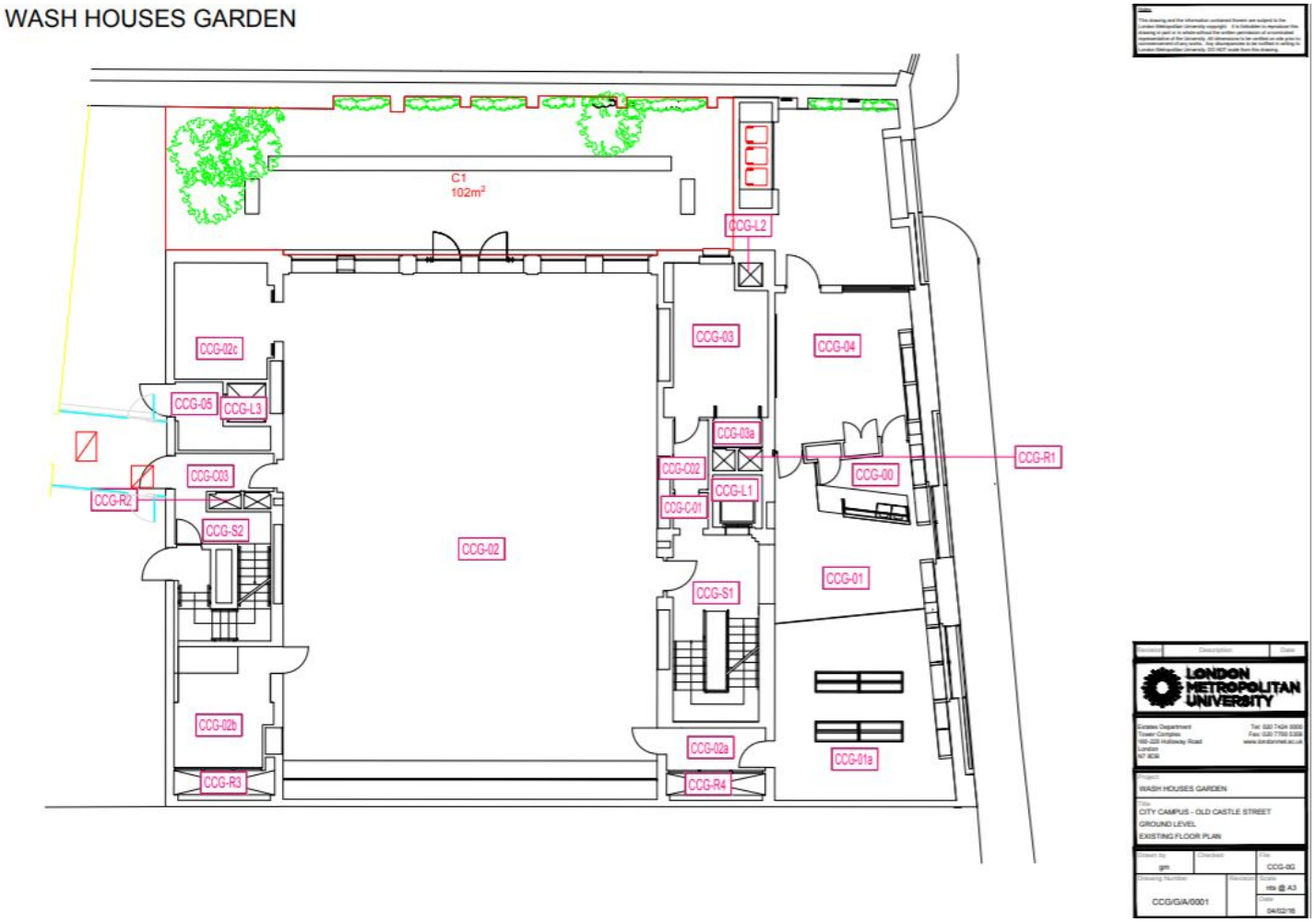
Calcutta House Roof garden

CALCUTTA HOUSE ROOF GARDEN

1.Storage Box
2.Rainwater Bucket

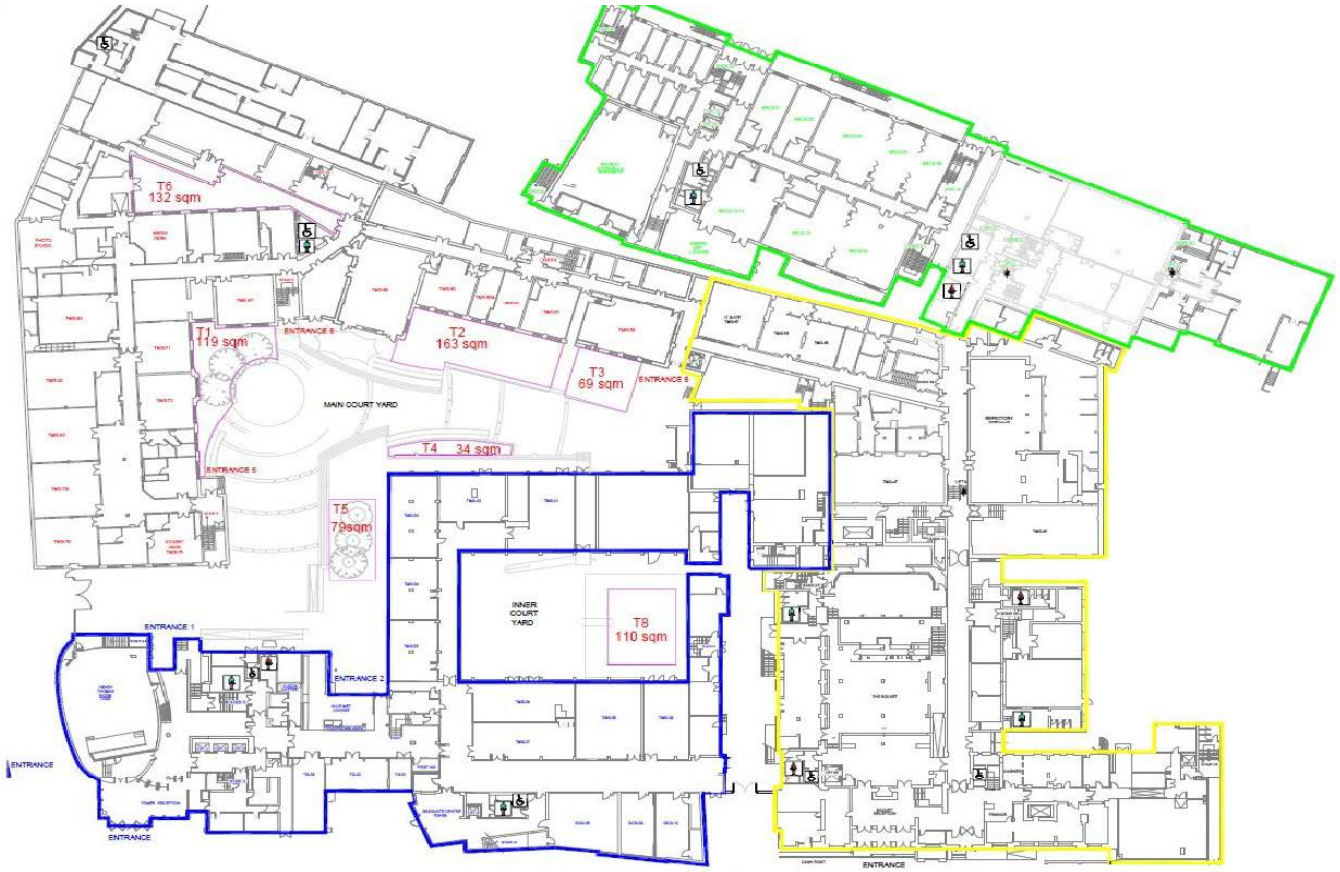
Appendix 2.

25 Old Castle Street, Wash Houses



Appendix 3.

Tower Building Main Courtyard



TOWER BUILDING, GROUND FLOOR

Appendix 4.

Tower Building, Roof garden