

London Borough of Hammersmith & Fulham

Community Safety, Environment and Residents Services Policy and Accountability Committee

16 November 2016



URBAN ECOLOGY AND BIODIVERSITY IN HAMMERSMITH & FULHAM

Report of the Cabinet Member for Environment, Transport & Residents Services, Councillor Wesley Harcourt

Open Report

Classification - For Policy & Advisory Review & Comment

Key Decision: No

Wards Affected: All

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1. EXECUTIVE SUMMARY

- 1.1. This report provides an overview of the council's work to improve biodiversity, including work in parks and tackling air pollution. It also considers how the council involves its residents in increasing biodiversity.
- 1.2. In Hammersmith and Fulham, we are taking numerous measures to maintain and enhance biodiversity and work with residents to achieve this goal. Through planning policy, improving our parks and open spaces, tackling air pollution and a range of other greening initiatives we are working towards our goal to be the greenest borough.

2. RECOMMENDATIONS

- 2.1. It is recommended that the committee notes and comments on the council's work to conserve and improve biodiversity in Hammersmith and Fulham.

3. PROPOSAL AND ISSUES

Biodiversity

- 3.1. Biodiversity refers to the variety of plants and animals and other living things in a particular area or region. A healthy, properly functioning natural environment is the foundation of sustained economic growth, prospering communities and personal wellbeing. A well-balanced natural environment provides a green economy, pollination, water purification, sustainable urban drainage, flood reduction, enhances air quality, climate moderation, removes pollutants, and enhances mental and physical health and wellbeing & social cohesion.
- 3.2. Demographic change, economic growth, climate change, new technologies, societal preferences, and changes in policy and regulatory environments may all have profound consequences on the ecosystem. Establishing a robust ecological network in Hammersmith & Fulham will improve nature's ability to withstand these pressures and protect our natural environment for residents now and in the future.

The law

- 3.3. Local authorities are by law (section 40 of the Natural Environment and Rural Communities Act 2006) responsible for conserving biodiversity, which includes restoring or enhancing a population or habitat, in exercising its functions.
- 3.4. The Wildlife and Countryside Act 1981 provides protection for a range of birds, animals, plants, and habitats. It is against the law to damage the nest of any wild bird i.e. illegal to trim a hedge that is home to a nesting wild bird. It is an offence to intentionally pick, uproot or destroy any wild plant or to kill

animals protected by the Act such as bats, and certain types of moth and beetle.

- 3.5. In October 2010 in Nagoya, Japan, over 190 countries around the world reached an historic global agreement to take urgent action to halt the loss of biodiversity. In response, the Government's Biodiversity 2020: 'A strategy for England's wildlife and ecosystem services' sets out the ambition to halt the overall loss of England's biodiversity by 2020 with a longer term ambition to move to a net gain position.
- 3.6. There is a requirement under the National Planning Policy Framework that the local authority planning system both contributes to and enhances the natural and local environment. It must minimise impacts on biodiversity and provide net gains, and contribute to halt the overall decline by establishing coherent ecological networks that are more resilient to current and future pressures.

Local context

- 3.7. As a densely urbanised inner London borough, little remains of Hammersmith and Fulham's original natural ecosystem complexes. Despite this, many quality wildlife habitats exist along the borough's waterways and rail tracks and within its parks, cemeteries and community gardens where these are not over-manicured. The River Thames and the Grand Union Canal also form two important 'blue' wildlife corridors.
- 3.8. A 1988 study of the borough's wildlife habitats identified a total of 225 hectares of green space in the borough that constitutes 14 percent of the total surface area of the borough. A breakdown of this into different habitat types shows that over 60 percent of green space in the borough (150 hectares) comprises formal parkland, sports pitches, and amenity grassland. Of the remainder, the majority is grassland (30 hectares) and herbaceous communities (18 hectares). There is only around six hectares of native woodland that remains in the entire borough. An up to date study is required to inform future policy.
- 3.9. Natural areas of importance in Hammersmith & Fulham include Metropolitan areas, Borough Wide areas (Grade I and Grade II), areas of Local importance and Green Corridors (see Appendix 1).
- 3.10. Our housing estates have a mix of both hard and soft external surfaces. The large and small estates contain some 4,000 trees of varied species. One garden - The Grange, Lisgar Terrace - is of local historical importance with a connection to the pre-Raphaelite painter Edward Burne-Jones. There is potential to improve local biodiversity, surface water management, and air quality through improvements to both the ground level surfaces, and to the footprint of 45,000sqm of flat roofed buildings managed by Housing.
- 3.11. The borough's streets are lined with approximately 9,000 trees. The traditional species like London Planes and Limes, a legacy from the first wave of planting in the late C19th and early C20th, account for 2,000. The remaining 7,000 are comprised of predominately of the smaller ornamental species such as Cherry Blossom, Rowan, Pear and Whitebeam trees.

- 3.12. The larger species, chosen for their ability to tolerate the heavily polluted air from industry and coal fires and regular pollarding, now make the largest contribution to canopy cover. This cover is an important factor in mitigating the effect of urban heat islands and extreme rainfall events.

4. OPTIONS AND ANALYSIS OF OPTIONS

How we are working to improve biodiversity

Urban ecology policy

- 4.1. We are drafting an urban ecology policy that sets out our ambitions to improve and maintain the natural environment and increase biodiversity in Hammersmith & Fulham. Opportunities to enhance and create new habitats for biodiversity in the borough will mostly exist in:
- incorporating design measures to increase biodiversity within new developments;
 - improving the quality of existing nature conservation areas and green corridors; and
 - making existing open spaces more multifunctional and capable of supporting biodiversity.
- 4.2. In line with the national strategy, our policy will set out our proposals to:
- build a robust ecological network by putting biodiversity as part of the decision making process including the Local Plan and Air Quality Action Plan;
 - put people at the heart of biodiversity by engaging with local residents, schools, volunteers and environmental groups;
 - reduce environmental pressures by creating new habitats, green corridors and stepping stones, and managing existing habitats;
 - improve our knowledge and understanding of the current position, the pressures and what can be done to enhance biodiversity. Commission an up to date ecological study to inform future policy and strategic delivery. Understand that ecological networks do not stop at the borough boundaries by sharing our findings with relevant organisations.

Future development and securing nature's place

- 4.3. The closely built-up nature of the borough, and the overall deficiency in accessible nature conservation areas, makes it important that all new developments respect existing nature conservation interest and provide future opportunities to improve the biodiversity of the area.

- 4.4. The council's draft Local Plan is due to go out to consultation soon. It sets out a number of planning policies to enhance biodiversity and green infrastructure in the borough including:
- Maximising the provision of gardens, landscaping and green/brown roofs;
 - Protecting gardens and encouraging planting in back and front gardens;
 - Seeking retention of existing trees and provision of new trees
 - Adding to the greening of streets and the public realm.
 - To protect, enhance and increase provision of parks, open spaces and biodiversity in the borough by: designating a hierarchy of open space that includes metropolitan open land, land of borough wide importance and local importance as well as a hierarchy of nature conservation areas of metropolitan, borough and local importance, and green corridors along the borough's railway lines
 - Protecting existing water dependent uses and requiring new development to enhance river and canal related biodiversity.
 - Require the implementation of sustainable design and construction measures in all major developments to conserve and promote biodiversity and the natural environment.
- 4.5. The Supplementary Planning Document (SPD), July 2013, provides supplementary detail to policies concerned with a variety of topics when considering development proposals. The SPD is a material consideration in planning decisions.
- 4.6. The SPD details biodiversity policies to protect existing and designated habitats and species, requires developers to assess the impact of development on nature conservation and to enhance biodiversity, for example, through:
- Creating new green infrastructure, including green corridors linking habitats on and next to the site so that wildlife can move between habitats;
 - Creating new habitats such as hedges and ponds that will benefit wildlife. Often even small scale, cost effective habitat creation can provide significant biodiversity gains
 - Integrating nesting and roosting opportunities for bats and birds into buildings and other built structures;

Improving air quality and nature's role

- 4.7. Nature plays a role in reducing pollutants in the air but it can also be vulnerable to poor air quality. The Woodland Trust have produced a guide to selecting tree species in urban setting, which ranks trees by their ability to improve air quality. The Forestry Commission has produced guidance on planting strategies that are both resilient to air pollution and help to improve air quality.
- 4.8. In January 2016, Hammersmith & Fulham Council established a resident-led Air Quality Commission to review the evidence and to engage with experts in

the field and local residents to examine the causes and dangers of local air pollution and to consider potential solutions to help reduce it.

- 4.9. The Commission has produced a report on the outcome of that work that makes a series of recommendations aimed at national and regional government, Hammersmith & Fulham Council, businesses and local residents themselves. These include measures that directly benefit biodiversity:
- The Council to develop an Urban Ecology Plan to drive greening policy and practice across the borough.
 - Incorporate arboricultural and greening policies into the Local Plan and Supplementary Planning Documents (SPDs).
 - The Council to use its enforcement powers to ensure developers fulfil commitments in delivering tree-planting plans.
 - Schools to involve pupils in greening initiatives as a means of both improving their local environment and educating the next generation on the importance of urban ecology.
 - The Council to stagger tree pruning to one in every three trees every three years.
 - The Council to increase tree, hedge and grass planting on Council-owned land and highways.
 - The GLA to continue to commission regular studies to measure and monitor tree, hedge and grass cover across London boroughs.
 - The Council and developers to seek ways of maintaining mature tree cover when planning for new developments.
- 4.10. We will be consulting on a new five-year 'air quality action plan', in line with the Commission's recommendations, to meet our legal requirement as a designated 'air quality management area'. The plan will list actions, timescales, using the London Mayor's template, and assign responsibility to parts of the council to complete. Actions include, for example, selecting the right trees, hedges and grasses to be planted in the right places in order to combat air pollution directly and enhance biodiversity and this greening of the borough indirectly encourages more people to walk and cycle.
- 4.11. We expect the consultation to commence later in the year.

Conserving and enhancing biodiversity in parks and open spaces

- 4.12. Our local parks and open spaces account for 60 percent of our green space. Managing these habitats well is fundamental to conserving and enhancing biodiversity.
- 4.13. We are one of the first councils in London to ban the spraying of the herbicide glyphosate and to review our use of other pesticides/herbicides. For the past six months we have been exploring innovative chemical-free alternatives, including the use of hot foam and steam, with the aim of finding an affordable alternative solution to control weeds

- 4.14. There are 15 Green Flag Awards held within the borough of which 11 of these are within our parks and cemeteries. These are Bishops Park and Fulham Palace, Brook Green, Frank Banfield Park, Hammersmith Park, Hurlingham Park, Margravine Cemetery, Normand Park, Norland North, Ravenscourt Park, South Park, St Peter's Square. A further two council owned sites managed by community organisations also hold Green Flag Awards. To achieve green flag award status, eight key criteria must be met these include sustainability and biodiversity.
- 4.15. Where landscape projects are undertaken in parks there is an emphasis on improving biodiversity. A recent example is at Gwendwr Gardens where the planting was designed to be aesthetically pleasing and low maintenance with a long flowering period that promotes wildlife and biodiversity.
- 4.16. Friends' of Parks' is an existing initiative allowing residents to play an active role in the management and improvement of parks and open spaces. Groups are already in place at 19 sites including Ravenscourt Park, Bishops Park, Wormwood Scrubs, Margravine Cemetery, South Park, Marcus Garvey Park and Brook Green
- 4.17. The work of the Friends supports our ambitions to improve biodiversity. An example, the Friends of Marcus Garvey Park, has 80 members and recently received grant funding that paid for fencing to create a separate wildlife area now used by the schoolchildren, with walls surrounding the park covered by a bee-themed mural by local artist Tania Beaumont. The group also made and painted bird boxes.

Creating habitats for nature on our streets

- 4.18. Our streets provide the opportunity to create green corridors within our urban environment, thus allowing the movement of wildlife along it, which is fundamental to maintaining a diverse natural environment.
- 4.19. We have successfully delivered multiple sustainable urban drainage systems (SuDS) within the public highway over the past couple of years. These not only manage surface water but also provide valuable additional green space and enhance the biodiversity of an otherwise bleak environment. Key projects include:
- Bridget Joyce Square (Australia Road) – the transformation of an existing highway through the introduction of 335m² of bio-retention basins and 120m² of rain gardens. Planted with 2,500 plants and 50 trees with a wide variety of species ranging from grasses, bulbs and herbaceous perennials to Himalayan Birch trees, converting a traditional highway environment into a biophilic oasis for the community to enjoy.
 - Talgarth Road – An air quality and SuDS project that introduces a green barrier of Miscanthus with a Euphorbia and Geranium border along a busy 170m stretch of highway to help protect pedestrians and cyclists from pollution. These planted areas also take surface water directly from the highway to reduce the loading on the sewer.
 - Stevenage Road – The introduction of 130m² of rain gardens planted with approximately 2,000 plants of various species, in between existing street

trees. This SuDS scheme will reduce the rate surface water reaches the sewer and will enhance the biodiversity in the local area.

- 4.20. The trees that line our streets provide for species habitat and increasing biodiversity is one of many factors considered when selecting them. Where practical, we select indigenous species in preference to exotic trees as they provide habitat for a wider range of fauna. Some species with dense crowns are likely to provide better nesting opportunities for small birds that traditionally would have nested in hedgerows and thickets.
- 4.21. Pollarding is a common maintenance method in the urban environment, especially with species like London Plane and Lime. The pollarding cycle is typically between 2-5 years. The biodiversity is poorer as few trees are older than a 100 years, which in tree terms is relatively young and species like Plane do not support a wide range of fauna.
- 4.22. There is a need to maintain a diversity of trees species and avoid monocultures. Biodiversity helps provide resilience to the present threat from new or introduced pests and diseases. As part of this biodiversity, we need to look at new tree species, which might be better suited to the more challenging urban conditions, brought about by climate change, and increased development pressures.
- 4.23. We have introduced a new scheme to invite residents to plant shrubs, herbs and flowers in tree bases on their local streets. This new scheme supports our aspiration to become the greenest, most environmentally friendly borough in the country and make it easier for residents to get things done in their neighbourhood. Planting creates essential green corridors and stepping-stones across the borough enhancing biodiversity. The scheme is welcomed by environmental charity, Hammersmith Community Gardens Association, which manages several community gardens in the borough.
- 4.24. We are also looking at the potential to work with 'The Edible Bus Stop' and residents to try to bring community lead planting initiatives to bus stops across the borough.

Biodiversity and housing

- 4.25. London, despite its urban environment, provides a diverse range of habitats for flora and fauna. Green space in gardens, communal and private grounds, and roofs all provide vital stepping-stones to maintain and enhance biodiversity.
- 4.26. We have worked with residents over recent years on projects aimed at improving flood risk management and biodiversity on estates across the borough.
- 4.27. In 2012/2013, we introduced green roofs, rainwater gardens, food growing and swales on a large scale at Flora Gardens.
- 4.28. Following on from the success of this project, we commissioned (in 2013/14) a large-scale project partly funded by the European Union Life+ scheme that has demonstrated the strategic opportunity for climate change adaptation of open spaces in a social housing environment. It increased the functional

green infrastructure of the estates, and improved local strategic flood risk interventions. The outputs of the project – where works were carried out at Queen Caroline and Maystar estates and Cyril Thatcher and Richard Knight houses - are:

- 2,500m² of enhanced green infrastructure
- 25% increase in permeable surfaces
- 20,000m³ of water retention capacity
- 600 trees planted
- 600m² of green roofs
- 400m² of food growing capacity
- 10 rain water harvesting systems

- 4.29. As part of the EU Life+ project, a green roof was installed. As well as the environmental benefits identified, a further anticipated benefit of the green roof is the extended lifespan of the roof beyond the normal expected timescales. Subject to identifying available funding for the green roof additions, there is scope to adopt this approach to all programmed flat roof renewal for residential blocks, and to upgrade all the outbuildings on estates to achieve additional green surfaces.
- 4.30. The interventions retrofitted on these estates have proved so successful that the project has received additional funding from Thames Water to increase the rainwater retention further.
- 4.31. Residents enthusiasm following the success of the project lead to other bids in 2015/16 for funding through our resident led 'Housing Improvement Project' fund, to install further green roofs, food growing – (including a large scale allotment at one estate) and a beehive. These projects are ongoing.
- 4.32. Other incremental changes have taken place since 2012 with wildflower planting and food growing, fruit tree orchards introduced and bug hotels, bird houses and bat boxes installed on varying scales at several housing estates and sheltered housing schemes.

Tidal Fish Conservation

- 4.33. The Zoological Society of London produced guidance (Conservation of Tidal Thames Fish through the Planning Process) in October 2016 to protect important life stages of fish species and their habitats in the Tidal Thames. This is a collaborative initiative supported by several institutions including us at Hammersmith & Fulham.
- 4.34. The Guidance Document for Developers, Planners, Biodiversity or Environmental Officers in Local Government and Ecological Consultants provides a single point of reference for information relating to fish conservation in the region.
- 4.35. The document arose out of a Smelt (fish) conservation project that identified a total of 455 smelt fry and 28 smelt eggs. These data narrowed down the most likely smelt spawning location to a 600m stretch of the Thames by Wandsworth Bridge. It showed that smelt are likely to spawn over an elongated period of 5 weeks from the beginning of March.

Conclusion

- 4.36. In 2010, the independent review of England's ecological network, 'Making Space for Nature', concluded that it is fragmented and not resilient to external pressures such as climate change. It summarised its recommendations in just four words: more, bigger, better and joined.
- 4.37. In Hammersmith & Fulham, we recognise that the importance of biodiversity cannot be understated. We are taking great strides to conserve and enhance our natural environment.
- 4.38. Stopping the use of harmful herbicides, creating new habitats on our streets and houses, effectively managing our parks and open spaces, and requiring new developments to maintain and enhance biodiversity are just a few of the measures we have taken.
- 4.39. We are working to be the best and the greenest borough and the introduction of a new urban ecology policy will set out our aims to achieve this goal and provide more, bigger, better and joined habitats to enhance biodiversity.

5. CONSULTATION

- 5.1. The council is to consult on the Local Plan, Air Quality Action Plan and Urban Ecology Policy in the near future.

6. EQUALITY IMPLICATIONS

- 6.1. Not applicable.

7. LEGAL IMPLICATIONS

- 7.1. The legal implications are provided for in the body of the report and are found particularly at paragraphs 3.4-3.7.
- 7.2. *Implications verified/completed by: Joyce Golder, Principal Solicitor, 020 7361 2181*

8. FINANCIAL IMPLICATIONS

- 8.1. An ecology survey will be required to inform future policy. Undertaking and managing the outcome of the survey may incur a cost in the order of £60,000. Funding may be available from Section 106 but this will need to be weighed against other projects.

- 8.2. Implications verified/completed by: (Gary Hannaway, Head of Finance, 020 8753 6071).

9. IMPLICATIONS FOR BUSINESS

- 9.1. Business can play a significant role in maintaining and enhancing biodiversity through its practises. A green economy is just one benefit of an conserving the natural environment.

10. RISK MANAGEMENT IMPLICATIONS

- 10.1. The environment can be safeguarded by the conservation and improvements already delivered by this council. Environmental risk management can be further improved through the development of an Urban Ecology Plan as recommended by the Commission.
- 10.2. *Implications completed by: Michael Sloniowski, Risk Manager, telephone 020 8753 2587.*

11. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

None

Appendix 1 – Nature conservation areas

- ♦ Metropolitan Importance – Grand Union canal, River Thames, Chelsea Creek, Kensal Green Cemetery
- ♦ Borough Wide Importance – Grade I: Wormwood Scrubs, Old Oak Common, Fulham Place and Bishops Park, Hurlingham Grounds, Rail side habitats.
Grade II: St Mary's Cemetery, Hammersmith Pk, Ravenscourt Pk
- ♦ Local Importance – White City community Gdns, Wormholt Pk, Wendell Park, Cathnor Park, Shepherds Bush Common, Furnivall Gdns, St Paul's Open Space, Fulham Palace Rd Cemetery, Normand Park, South Park, Eel Brook Common, Little Wormwood Scrubs Pk, Loris Rd Community Gdn, Goldolphin Rd Cemetery, Hammersmith Cemetery
- ♦ Green Corridors – Rail embankments, verges, highways and sidings

