# Living in the Landscape

**Thamesmead Biodiveristy Action Plan 2020** 





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# Living in the Landscape Commissioned by Peabody from LDA Design

This Framework was created in collaboration with: Continuum Sport and Leisure, Green Infrastructure Ltd., Land Management Services, Project Orange, Robert Bray Associates, SNC-Lavalin Atkins and Vivid Economics.





#### What is Biodiversity?

Biodiversity is the variety of all life on Earth including animals, plants, fungi, microbes and the habitats where they live. Fully functioning ecosystems provide services, which humans depend on, for example; oxygen, clean water, pollination, shelter, food and medicines. Conserving biodiversity is essential for the economy and society, as well as combating climate change.

#### **Nature in Thamesmead**

Thanks to the vision of the Greater London Council's planners and architects, Thamesmead is already exceptionally green and blue. It has 30,000 trees, 7km of canals, 5km of Thames foreshore and six major lakes. There are 75 hectares of accessible green spaces, as well as nature reserves and neighbourhood parks.

Tump 53, at the heart of Thamesmead, is a wetland nature reserve with classroom facility. Nearby to the south, is Lesnes Abbey Wood SSSI, an 88-hectare woodland, and to the east, Crossness Nature Reserve, a remnant of the grazing marshes that once covered the area.

#### **UK Biodiversity Action Plan**

The UK BAP was produced in 1994 following the Earth Summit in Rio de Janeiro and as a response to the UN Convention on Biological Diversity in 1992. The aim of the UK BAP was to conserve and enhance ecological diversity within the UK.

The UK BAP is achieved by identifying, protecting and improving priority habitats and species with a long-term strategy plan, delivering biodiversity conservation.

#### **London Biodiversity Action Plan**

The London BAP was the regional response to the UK BAP and was managed by the London Biodiversity Partnership. It included action plans for UK BAP habitats and species where they are relevant to London. The London BAP is still being followed by people and organisation working at the local level.

#### **Local Biodiversity Action Plans**

Local BAPs are designed to target and increase awareness on priority habits and species in local areas. These BAPs designate local actions with clear step-by-step guidance for anyone interested in conserving wildlife. The Local BAPs relevant to Thamesmead are the Greenwich BAP and Bexley BAP.

### **National Planning Policy Framework**

The National Planning Policy Framework (NPPF) sets out the Government's environmental, social and economic planning policies for England. It provides a framework for new planning applications for new developments to be sustainable. NPPF benefits and support local communities creating opportunities for employment, new homes, infrastructure, culture and health and wellbeing.

The NPPF, which was updated in 2019, supports the concept of Biodiversity Net Gain (BNG). The intention is for the BNG objective to guide those planning and delivering new developments to ensure that the landscape is enhanced, and that biodiversity is increased overall.

## **Biodiversity Net Gain**

The intention with BNG is to ensure that where there is development, biodiversity is in a better state than before. The measurement of Biodiversity Net Gain will be an important aspect of implementation. The government has published metrics to assist those measuring BNG.

#### **Thamesmead Green Infrastructure Strategy**

As part of Peabody's Plan for Thamesmead, a Green Infrastructure Strategy is being prepared. It aims to enhance and connect nature and to create healthier and more social places in Thamesmead for existing and new residents.

The strategy prioritises pedestrians and cyclists and supports culture, sport and informal recreation. The intention is to improve water quality, reduce flood risk and create jobs and volunteering activities. The strategy supports tree planting, more street trees, green roofs, rain gardens, food growing opportunities and more wildlife. Hence this Biodiversity Action Plan.

## INTRODUCTION

#### **Thamesmead Biodiversity Action Plan**

The Thamesmead Biodiversity Action Plan will complement the Green Infrastructure Strategy and has identified habitats and species with high conservation value. It presents specific guidance to protect and enhance these priority habitats and species, with the aim of creating a stronger ecosystem connecting habitats for the benefit of people and wildlife.

The BAP supports other initiatives designed to create a better place for opportunity, education, physical and mental health, bringing communities together for resilience to rapid climate change and other threats.

#### Aims of this Biodiversity Action Plan are to:

- Provide a framework for guiding nature conservation efforts
- Highlight priority habitats and species
- Encourage an integrated approach with other initiatives
- Encourage awareness, education and community involvement
- Develop Thamesmead as a centre of excellence for urban nature conservation
- Encourage staff, residents and visitors to nurture biodiversity

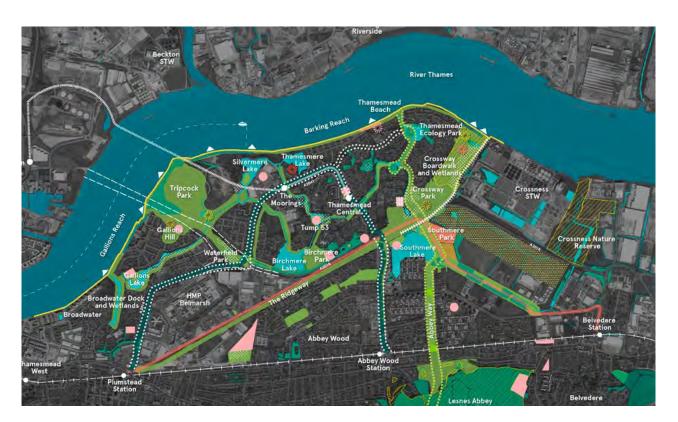
# • Ensure that biodiversity and progress in implementing the plan is monitored and measured

Implementation of the Plan will involve many of Peabody's partners, teams and projects, including NGOs, community groups, angling clubs, conservation volunteers, people involved in planning and design, the maintenance team and contractors, amongst others.

Most of the work for the BAP will be undertaken as part of the continuing maintenance, planning, design and construction programmes, however, Peabody will create a budget to support work associated with implementing the BAP.

Peabody will also appoint a Champion within its staff for the BAP, who will collate information relating to the BAP and monitor progress. The Champion will have access to the Chief Executive, in the unlikely event that implementation of the BAP loses momentum.

- 1 https://www.nhm.ac.uk/discover/what-is-biodiversity.htm
- 2 http://uknea.unep-wcmc.org/EcosystemAssessmentConcepts/EcosystemServices/tabid/103/Default.aspx
- 3 https://jncc.gov.uk/our-work/uk-bap/
- 4 https://www.gigl.org.uk/planning-projects/londons-biodiversity-action-plan/
- $5\ https://www.royalgreenwich.gov.uk/info/200222/policies\_and\_plans/707/biodiversity\_action\_plans/200222/policies\_and_plans/2002020/policies_and_plans/200200/policies_and_p$
- 6 https://www.bexley.gov.uk/sites/bexley-cms/files/Bexley-Biodiversity-Action-Plan-Adopted-June-2011.pdf
- 7 https://www.gov.uk/government/publications/national-planning-policy-framework--2
- 8 https://cieem.net/i-am/current-projects/biodiversity-net-gain/
- 9 http://publications.naturalengland.org.uk/publication/5850908674228224
- 10 https://www.thamesmeadnow.org.uk/media/3093/peabody-plan-for-thamesmead-march-2019 pdf







# **SELECTING THAMESMEAD'S PRIORITY HABITATS AND SPECIES**

Priority habitats and species in the Thamesmead BAP were selected by considering the London, Greenwich and Bexley BAPs and including species suggested by experts and conservation volunteers. If too many species were to be included, there might not be sufficient resources to undertake all the projects and the monitoring that would be required.

Although efforts will be focussed on those species selected, it is important to note that by supporting those species listed many others will also benefit, given the interconnected way ecosystems work. Some species have been chosen as representative or indicative of what will become a more biodiverse landscape overall.

The Thamesmead BAP will be reviewed every five years, at which time, there will be an opportunity to review the lists.

Table 1: Thamesmead Priority Habitats

Built Environment  Gardens  Parks and green spaces  Brownfields (Wasteland)  Wetland  Grazing Marsh  Woodland	Habitat	London BAP	Greenwich BAP	Bexley BAP	Thamesmead BAP
Parks and green spaces  Brownfields (Wasteland)  Wetland  Grazing Marsh  • • • • • • • • • • • • • • • • • •	Built Environment	•			•
Brownfields (Wasteland)  Wetland  Grazing Marsh	Gardens	•	•		•
Wetland • • • • • • • • • • • • • • • • • • •	Parks and green spaces	•	•	•	•
Grazing Marsh		•	•		•
	Wetland	•	•	•	•
Woodland • • •	Grazing Marsh			•	•
	Woodland	•	•	•	•

# SELECTING THAMESMEAD'S PRIORITY HABITATS AND SPECIES

Table 2: Thamesmead Priority Species

Species	London BAP	Greenwich BAP	Bexley BAP	Thamesmead BAP	Remarks
Black poplar	•	•	•	•	Very rare species requiring special efforts
Viper's Bugloss				•	Typical of biodiverse green roofs and dry grasslands. Will benefit wild bees
Stag Beetle	•	•	•	•	Dead wood for stag beetle will benefit other species
Dragonflies	•			•	Scarce emerald damselfly in 2008 London BAP review. Dragonflies good indicator of wetland health
Bumblebees				•	Selected as a flagship group to benefit all pollinators
European eel	•			•	Culturally important and threatened. Thames21 projects underway
Tench				•	Suggested by anglers. Will require appropriate lake management
Reptiles	•			•	Group benefits from more sunny, rough vegetation
House sparrow	•			•	A focus for Built Environment improvements
Sand martin	•			•	Will benefit from artificial nest sites close to lake
Black redstart	•	•		•	Benefits from extensive green roofs
Peregrine falcon	•			•	Will benefit from artificial nest sites
Grey heron	•			•	Heronry at Tump 39
Common tern				•	Will benefit from nesting rafts
Reed warbler				•	Benefits from increase in reed beds
Water vole	•	•	•	•	Benefits from improvements to canals. lakes and ditches
Hedgehog	•	•		•	Habitat connectivity a key issue
Bats	•	•	•	•	Will benefit from wetland and woodland improvements and uses artificial roosts and hibernation sites





#### Introduction

The Thamesmead BAP identifies seven priority habitats where there will be an aim to bring about enhancements and increases in the area of habitat in order to improve the integrity and connectivity of Thamesmead's ecological network.

Habitat connectivity, in terms of corridors, steppingstones and barrier crossing points is crucial for movement of wildlife. An improved ecological network makes the area more permeable to wildlife and people.

Habitat creation and restoration will also protect and buffer Thamesmead existing nature reserves. Peabody maintains habitat maps within its GIS database. These maps will be updated as baseline surveys are undertaken as part of development planning. In addition, habitat mapping of the whole of Thamesmead will be updated every 5 years in order to measure changes in the extents of various habitats.

Methods (including Defra biodiversity metric) may be used to measure changes in quality in order to ensure that Biodiversity net Gain. As been achieved.

The Habitat Action Plan describes each habitat category, sets out the main threats and describes the action that is required for improvement.

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#### **Built Environment**

The built environment includes all the existing and new buildings and grey infrastructure, which includes roads and footpaths. Thamesmead will see new development and renewal in the years to come, so it is important that opportunities are taken to green what might otherwise be grey environments, not only for biodiversity, but also for climate change adaptation.

#### Aims

- To ensure that the area of biodiverse extensive green roofs increases
- To increase the number of features for wildlife

#### **Threats**

- Opportunities missed for habitat creation and installation of features for wildlife in refurbishment and new build
- Inappropriate maintenance and pest control

#### Action

- Protecting the existing nesting, roosting and foraging sites for wildlife on and around buildings in Thamesmead.
- Establish green roofs, green walls, rain gardens, street trees, nest boxes for birds, roosts and hibernation sites for bats and features for invertebrates (e.g. bee hotels) on existing and new buildings.
- Ensure that artificial lighting is designed in a way that minimises impact on bats and other wildlife.

#### **Further Information:**

#### Green roofs:

Livingroofs.org

BugLife Creating Living Roofs for Invertebrates Best Practice Guidance

https://cdn.buglife.org.uk/2019/07/Creating-Green-Roofs-for-Invertebrates\_Best-practice-guidance.pdf

#### Bats and lighting:

https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/www.bats.org.uk







# **BIODIVERSITY IN ACTION**

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#### Gardens

Gardens make up over a third of London's green spaces. Thamesmead includes many private gardens. They are often small, however they do cover a significant area and are spread across the whole estate. Gardens can be havens for birds, hedgehogs and amphibians and can provide important steppingstones for wildlife to migrate through the built environment. Wildlife gardens offer benefits to physical and mental health.

#### Aim

- To increase awareness of wildlife gardening
- To halt loss of vegetated gardens

#### **Threats**

- Lack of awareness of the value of gardens as green corridors for plants and wildlife
- Increases in sealed services including patios, decking and artificial lawns, which decreases space for wildlife
- Unmanaged gardens are a target for litter
- Use of pesticides which reduces diversity and insect populations
- Disturbance from domestic pets to wildlife

#### Action

- Work with the Community Gardener to educate people on how to plant gardens to benefit wildlife and people's wellbeing
- Increase the use of balconies and window boxes for growing
- Encourage and support wildlife-friendly gardening through events, citizen science projects, school projects and social media
- Encourage wildlife ponds and bird baths in gardens
- Encourage installation of insect hotels and piles of dead wood for stag beetles and other invertebrates
- Encourage the provision of holes in fences and walls for hedgehogs
- Encourage planting for pollinators
- Encourage the installation of bird and bat boxes

#### **Further information:**

Naturehood: www.naturehood.uk Wildlife Trusts on wildlife gardening https://www. wildlifetrusts.org/gardening

RHS on wildlife gardening https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden







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#### Parks and green spaces

Parks are public areas people can engage with nature and enjoy recreational and social activates, benefitting physical and mental health. These areas are vital for sustaining wildlife in urban places and can include large trees and tree groups, cover for nesting birds and meadows, as well as more intensively maintained area.

Thamesmead has 75 hectares of greenways, parks and other accessible green space, which means that there is great potential for encouraging wildlife in these areas

#### Aim

To improve the ecological value of Thamesmead's parks and green spaces by reducing the area of improved grassland and replacing this with other more valuable habitats

#### **Threats**

- Recreational pressure increasing erosion, litter, dog fouling and disturbance to plants and animals.
- Conflicts associated with demands for parks to be 'neat and tidy', including excessive mowing, removal of deadwood and consequent low ecological value of some areas.
- Lack of awareness and appreciation of the value of biodiversity and the benefits of the outdoors.

#### Action

- Improve maintenance regimes by reducing the frequency and extent of mowing
- Implement schemes to plant native species or species with documented value for wildlife
- Install log piles and erect bird and bat boxes
- Create nature trails
- Involve residents and schools

#### **Further information**

Enhancing natural habitats in London's parks http://downloads.gigl.org.uk/website/parks\_people\_ and\_nature1.pdf







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#### **Brownfields**

Brownfields are previously developed sites, which can be contaminated but may also include low-nutrient soils, rubble and other materials. When neglected, these sites can support rich mosaics of vegetation and diverse communities of plants and animals.

Brownfield sites often support rare invertebrates, reptiles and bird species such as the black redstart. The Thames Gateway has the largest inventory of brownfield land in the south of England.

#### Aim

To maintain habitats and species associated with brownfield sites throughout Thamesmead

#### **Threats**

- Lack of understanding of the ecological value of brownfield sites. These areas may be affected by vandalism and fly-tipping
- Neglect can result in colonisation by invasive nonnative species such as Japanese knotweed
- Most brownfield sites are designated for redevelopment, which means that fragmentation of habitat and biodiversity losses can occur in the absence of appropriate avoidance, mitigation or compensation measures.

#### Action

- Ecological surveys to be carried out before development schemes are devised so that habitats and species of conservation concern are identified and programmes to ensure biodiversity net gain are implemented.
- Developments to include biodiverse green roofs and ground level open space to include features that compensate for those lost from brownfield sites (for example low-fertility soils). Similar features can be included in adjacent low diversity parks and open spaces.

#### **Further information:**

#### **BugLife, Thames Gatway brownfields:**

https://www.buglife.org.uk/resources/habitat-hub/brownfield-hub/all-of-a-buzz-in-the-thames-gateway/







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#### Wetlands

Thamesmead is a low-lying area with a network of freshwater habitats including wetlands, ponds, reedbeds, lakes, canals, all of which are vital for wildlife (including dragonflies, fish, waterbirds, water vole) as well as people. Notable features include the Tumps (moated former ammunition dumps), Southmere Lake, Birchmere Lake, Thamesmere Lake and the waterbodies at Gallions Park.

#### **Aims**

- To maintain the area of wetland in Thamesmead
- To improve water quality in Thamesmead's wetlands
- To increase the area of reedbeds and other emergent aquatic vegetation in Thamemead

#### **Threats**

- Pollution from urban runoff, misconnections and combined sewer overflows, causing algal blooms, reducing water quality and diversity of wildlife
- Sedimentation causing reduction in water depth in open water
- Littering
- Inappropriate feeding of wildfowl with bread, reducing water quality and increasing the rat population
- Hard steep edges to water bodies, reducing marginal aquatic vegetation

- Invasive non-native aquatic plants and animals having detrimental effects on native species
- Climate change increasing water temperature and extreme events including drought and flooding
- Disturbance to wildlife, particularly breeding birds, by people, dogs and cats

#### **Action**

- Raise awareness of the importance and value of conserving and enhancing freshwater habitats for biodiversity and people
- Reductions in littering and inappropriate feeding of waterbirds
- Improve water quality to all freshwater habitats through the use of sustainable drainage
- Increase the ecological connectivity of wetlands across Thamesmead by restoring natural features through urban sections
- Improve management of lakes for wildlife through joint-working with angling clubs
- Increase resident and school engagement through activities, including pond dipping and Citizen Science projects

#### **Further information:**

Freshwater habitats https://freshwaterhabitats.org.uk/

Reedbeds http://ww2.rspb.org.uk/Images/bringing\_reedbeds\_to\_life\_tcm9-385799.pdf







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#### **Grazing marsh**

Grazing marshes are seasonally flooded pastures and associated ditches. This makes them important foraging and breeding habitat for birds, bats and invertebrates. Ditch systems offer habitat for wetland plants, reptiles, amphibians and small mammals such as water vole.

On the eastern fringes of Thamesmead, there are fields with associated ditches, remnants of the grazing marshes that once covered the whole area.

#### Aims

To restore grazing marsh remnants in Thamesmead

#### **Threats**

- Overgrazing by horses
- Lack of appreciation results in littering and flytipping
- Pressure from new adjacent development including roads
- Neglect can lead to colonisation by invasive nonnative species
- Urban runoff can reduce water quality and cause sedimentation

#### Action

- Manage and restore overgrown ditches by removing invasive species and establishing appropriate vegetation. Establish a programme of desilting and reprofiling that increase biodiversity.
- Manage grazing through rotation and adjustment of stocking levels to allow areas of species-rich grassland to recover
- Regular and rapid removal of litter and fly-tipping
- Improve access for walkers, cyclists and riders

#### **Further information:**

Wildlife Trusts on coastal and floodplain grazing marsh https://www.wildlifetrusts.org/habitats/grassland/coastal-and-floodplain-grazing-marsh







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#### Woodland

Thamesmead is home to more than 30,000 trees, often occurring in belts of broadleaved woodland associated with parks and other open spaces. Nearby Lesnes Abbey Wood, to the south of Thamesmead, is an ancient woodland and classified as a SSSI.

Woodlands are important for many species of birds and bats, screen residents from wind and noise, help to reduce surface water runoff and to improve water quality in watercourses.

#### Aims

- To increase are area of native broadleaved woodland in Thamesmead
- To increase the diversity of woodland in Thamesmead

#### Threats

- Littering and fly-tipping
- Loss of standing and fallen deadwood
- Colonisation by invasive non-native species
- Fragmentation caused by roads and other urban features
- Poor access creating an unwelcome feel

#### Action

- Establish and maintain woodland paths and nature trails in selected locations so wheelchair users, cyclists and walkers can enjoy woodland
- Remove invasive non-native species
- encourage understorey and ground flora of native shrubs and woodland wildflowers
- Improve structure by establishing a coppicing plan to allow regeneration and reduce shading of ground flora
- Increase connectivity between fragmented woodland sites by the creation of woodland corridors through new tree and shrub planting
- Establish buffer areas of new woodland or woodland edge next to existing woodlands
- Plant additional native black poplar in appropriate areas
- Retain standing and fallen deadwood for invertebrates
- Identify veteran trees and prepare management plans for these specimens

#### **Further information:**

Woodland Trust on urban trees and woodland https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/habitats/urban-trees-and-woodland/

Trees for Cities www.treesforcites.org









# **SPECIES ACTION PLAN**

#### Introduction

The action plan proposes specific guidance to conserve 18 priority species within Thamesmead. The following actions to conserve these species will not only be important for the conservation value but will also have wider positive benefits on other species in Thamesmead.

Most of the actions within the habitat action plan benefit Thamesmead priority species, however some require species will require more targeted and persistent efforts in order to ensure success.

# **SPECIES ACTION PLAN**

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#### Black poplar

Native black poplar (Populus nigra ssp. betulifolia) is Britain's rarest timber tree, with an estimated 7000 specimens left in the UK.

Black poplar grows up to 30 metres in height, in floodplains and often alongside rivers and streams. It once played a vital role in rural life with its fire-resistant properties.

The black poplar is an important food source for the larval stage of moths, including the hornet moth. It is protected under section 13 in the Wildlife and Countryside Act 1981. There are a few specimens of native black poplar close to the river wall, to the north of the Town Centre.

#### Aim

To conserve existing specimens and increase the number of native black poplar trees in Thamesmead

#### **Threats**

- Unsuitable management of ground around existing trees prevents the regeneration of new trees in mud banks
- Low genetic diversity from historic use of cuttings for planting making the population susceptible to disease.
- Confusion with identification between native and hybrid black poplar has caused uncertainty over status

#### Action

- Survey existing native black poplars in Thamesmead and confirm genetic identity
- Identify suitable sites with appropriate space to plant verified cuttings
- Restore mud banks for the natural regeneration of black poplar

#### **Further Information:**

#### Black poplar by Forest Research:

https://www.forestresearch.gov.uk/research/archive-conservation-of-black-poplar-populus-nigra-l/

#### Lead for black polar London BAP.

F.Rumsey@nhm.ac.uk





#### Viper's bugloss

Vipers bugloss (Echium vulgare) is a biennial native wildflower with funnel-shaped purple flowers. It flowers from May through to September on chalk grassland, sand dunes and disturbed ground.

The nectar is an important food source for pollinators, especially bees and butterflies.

It can be found in London on brownfield sites, dry grasslands and extensive green roofs. T

here are records of this species in Thamesmead from the last decade (see bsbi.org/maps), however, this species is not commonly encountered.

#### Aim

To increase the abundance of this species in Thamesmead

#### Threats

- Excessive mowing and use of herbicides
- Natural succession and invasive species

#### Action

- Include in the re-seeding of grassland margins and decrease the intensity of mowing in locations where this plant has been established
- Use sand and other free-draining materials to create suitable condition in selected locations
- Increase awareness of this species through citizen science and school projects
- Ensure that extensive green roofs in Thamesmead contain this species

#### **Further Information**

Wildlife Trusts on viper's bugloss https://www.wildlifetrusts.org/wildlife-explorer/ wildflowers/vipers-bugloss

# SPECIES ACTION PLAN

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#### Stag beetle

The stag beetle is a globally threatened species and the largest terrestrial beetle in the UK.

Females lay their eggs underground within rotting deadwood and the roots of various rotten trees, from oak, ash, elm, apple and cherry. The larvae take five years to reach adulthood, feeding off decaying wood.

Once adulthood is reached, they emerge to mate between May–July and shortly after will die after mating. The long period for larval development (5–7 years) underground before adults emerge and mate, relies on buried deadwood.

Stag beetles bring many benefits to our environment by recycling nutrients back into the soil from increasing the decomposition of plant materials. Stag beetles are protected in the UK under the Wildlife and Countryside Act, 1981. Stag beetle is a Priority Species under the UK Post-2010 Biodiversity Framework.

The UK's distribution is concentrated in the South East of England, with London (including Greenwich and Bexley) an important hotspot. Stag beetles have been recorded at Crowden Way in Thamesmead.

#### Aim

To increase the abundance of this species in Thamesmead

#### **Threats**

- Losses of buried deadwood habitat
- Disturbance (trampling and vehicles) and predation

#### **Action**

- Increase deadwood in Thamesmead, by leaving stumps of felled and naturally fallen trees or burying suitable logs in suitable locations
- Increase education and awareness through a citizen science survey projects, school insect hunts, interpretation and art projects (see below)
- Maintenance team to avoid unnecessary disturbance of deadwood

#### **Further Information:**

Buglife's Great Stag Hunt. www.buglife.org.uk

#### **Peoples Trust of Endangered species**

www.ptes.org/get-involved/surveys/garden/great-staghunt/stag-hunt-survey/

#### London Wildlife Trust advice on stag beetles

http://live-twt-d8-london.pantheonsite.io/sites/default/files/2019-06/stag-beetle-london-wildlife-trust-advice-note-2016.pdf





#### **Dragonflies**

Dragonflies (Order: Odonata) are the largest flying insects in the UK and one of the most ancient group of insects, dating back 300 million years.

There are 30 species in Britain and Ireland. Dragonflies are associated with wetlands and rely on water bodies that are abundant in aquatic vegetation and places that are free from large predatory fish.

Larvae (nymphs) grow underwater and require clean water and aquatic plants. Nymphs can take several years to fully develop into an adult dragonfly where they will leave ponds as adults.

Adults require tall waterside vegetation for emergence, feeding and roosting near breeding ponds.

Ten species of dragonfly have been found at nearby Crossness Nature Reserve - see Bexley Wildlife website http://www.bexleywildlife.org/dragonflies-and-damselflies-in-bexley/

#### Aim

To increase the diversity and abundance of dragonflies in Thamesmead. Increase and maintain suitable habitat for all stages of the life cycle of dragonflies.

#### **Threats**

- Natural succession and invasive aquatic plant species, causing open water to become overgrown.
- Excessive nutrients into water and pollution from misconnections and surface water run-off decreasing overall water quality.
- Predation of larvae by fish.

#### **Action**

- Improve the water quality of existing water bodies.
- Increase suitable vegetation in aquatic areas and surrounding areas of water bodies.
- Increase education on the importance of native aquatic wildlife and vegetation. Public engagement events to be run, including pond dipping at Tump 53.
- Manage the succession of reeds to prevent open water from becoming overgrown.
- Creation of fish-free water bodies.

#### Monitoring and further information

Submit data to Peabody, GiGL and British Dragonflies Society:

www.british-dragonflies.org.uk/odonata/dragonflies-2/

# SPECIES ACTION PLAN

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#### **Bumblebees**

Bumblebees feed off nectar and pollen from early spring. Bumblebees are vital pollinators for wild plants and crops. They are ground-nesting and suitable overwintering sites are essential for the survival and success of bumblebees.

Queens will also nest in abandoned rodent burrows or grass tussocks. There are 24 species of bumblebees (of the genus Bombus) in the UK and around ten species in London. Bumblebees are included here as a flagship group, with actions that will benefit other pollinators.

Bumblebees are frequently seen in Thamesmead, especially buff-tailed bumblebee, common carder bumblebee and red-tailed bumblebee, however little is known about the range of species and their distribution.

#### Aim

To increase the diverse and abundance of bumblebees in Thamesmead]

#### **Threats**

- Loss of wildflowers
- Use of insecticides and herbicides
- Intensive mowing

#### Action

- Increase the area of wildflower-rich grasslands, woodland and woodland edge ground flora and biodiverse extensive green roofs. Planting should include, dead nettle, red clover, birds-foot trefoil, vipers bugloss, foxglove and raspberry.
- Create nesting places, including grass tussocks, crevices, burrows etc.
- Review the use of herbicides and inseticides.
- Educational projects including surveys to be run for schools and residents.

#### **Further information:**

**Bumblebee Conservation Trust** www.bumblebeeconservation.org

#### **London Natural History Society**

http://www.lnhs.org.uk/images/education/LNHS-Learning-10-Bumblebees-High-Res.pdf





#### **European Eel**

The European eel (Anguilla anguilla) is known for its impressive 6000km migration from the Sargasso Sea to Europe by the Gulf Stream. When young eels reach European waters, they change into glass eels. It is when they enter freshwaters that they turn dark and become elvers.

They migrate upstream to freshwater habitats. They feed on invertebrates and feed in wetlands for up to 20 years (as yellow eels) and can grow up to a metre in length.

Once ready to reproduce they will develop larger eyes and fins and migrate back to the Sargasso Seas as silver eels. The European eel is a UK BAP priority species and is considered to be critically endangered by the IUCN.

There has been a significant decline in elvers migrating up rivers in the last 30 years. The eel has been a traditional east London dish for centuries. It does occur in the Thames Estuary and Thamesmead, however, there was a decline of 98% in the number of eels appearing in traps placed by researchers in the tidal Thames between 2005 and 2010 - See https://www.theguardian.com/environment/2010/jan/21/eel-thames-population-crash

#### Aim

To increase the number of eels in Thamesmead

#### **Threats**

- Loss of freshwater and wetland habitat
- Dams, weirs and barriers preventing migration upriver
- Poor water quality
- Overexploitation by fisheries
- Increase of invasive fish species competing for resources

#### Action

- Install eel passes where it is feasible or remove barriers to migration
- Improve water quality
- Initiate educational projects

#### **Further Information**

**Eel Regulations (England and Wales) 2009:** www.eelsregulation.co.uk

**Eel monitoring coordinated by Thames21** https://www.thames21.org.uk/

# **SPECIES ACTION PLAN**

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#### **Tench**

Tench (Tinca tinca) is a native fish, with an olive-green colouration. It is a popular catch for anglers in summer and early autumn. Its preferred habitat is slow-flowing freshwater and soft bottom lakes, amongst abundant aquatic weeds and surface vegetation.

Diet consists of invertebrates, including pond snails. Spawning occurs in summer when the females lay eggs in shallow beds of algae. Tench occurs in Thamesmead, including Birchmere Lake and Southmere Lake.

#### Aim

To maintain a thriving population of tench in Thamesmead

#### **Threats**

- Poor water quality
- Competition from invasive species

#### **Action**

- Increase aquatic vegetation, especially weeds in lakes
- Improve water quality to benefit aquatic invertebrates
- Develop a programme in partnership with Thamesmead's angling clubs

#### **Further information**

#### Wildlife Trusts

https://www.wildlifetrusts.org/wildlife-explorer/freshwater-fish/tench

Send records to Thamesmead Canals Team







## **Reptiles**

There are six native species of reptile in the UK. All species are a UK BAP priority species. Three of the six species are found in Thamesmead including slowworm, common lizard and grass snake. All species are protected under the Wildlife and Countryside Act, 1981 and are priority species under the UK Post-2010 Biodiversity Framework.

The Slow-worm (Anguis fragilis) has a snake-like appearance, however, it is a lizard without legs. Slow-worms hide in warm places under stones, vegetation, or burrows in the soil. Slow-worms hibernate underground from October through to spring. Their diet consists of slugs and worms.

The Common lizard (Lacerta vivipara) has a long narrow body with short legs and a long tail. Usually found basking in the sun and move quickly when disturbed. Common lizards hibernate over winter through to March. Diet consists of invertebrates. They occur in patches of open, rough vegetation.

The grass snake (Natrix natrix) is a non-venomous snake, that lay eggs, in compost heaps or other piles of rotting vegetation in June. Grass snakes are associated with wetlands and feed on amphibians and small fish. The canals and wetlands in Thamesmead are suitable habitats for grass snake. Common lizard occurs in the rough vegetation along the Thames embankment. Slow worm occurs in lightly-managed woodland edges and verges.

### Aim

To maintain thriving populations of slow-worm, common lizard and grass snake in Thamesmead

#### **Threats**

- Loss of habitat and increased fragmentation of populations
- Unintentional killing from mowing and strimming
- Lack of knowledge and mistaken fear
- Predation by domestic cats

#### Action

- Determine the distribution of reptiles within Thamesmead through survey
- Protect existing hibernation features and create new ones
- Ensure site management provides suitable habitat for feeding, basking, breeding and hibernation for reptiles
- Maintenance teams to check before mowing or stimming in rough vegetation during summer
- Increase reptile conservation and awareness through educational initiatives and school projects

#### **Further Information**

Send records to Dragon Finder www.froglife.org

National Amphibian and Reptile Recording Scheme: http://www.narrs.org.uk London Amphibian and Reptile Group: www.arguk.org

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# **House Sparrow**

The house sparrow (Passer domesticus) lives close to humans. House sparrows nest in crevices and roofs of buildings as well as wall climbers and trees. Diet consists of seeds and insects. Insects are an essential food source for the development stages of young chicks. House sparrows have declined by 60% in the UK, with the most significant decline in South East England.

House sparrows are classified as red under the Birds of Conservation Concern 4: Red List for Birds (2015) and are a priority species under the UK Post-2010 Biodiversity Framework.

House sparrows do occur in Thamesmead, and this is still a relatively common bird, however, it is no longer ubiquitous with numbers declining over the years, as they have elsewhere.

#### Aim

To increase the population of house sparrow in Thamesmead

#### **Threats**

- A decrease in nesting sites, particularly in modern buildings
- A decrease in food availability (particularly insects) with the loss of rough vegetation and use of pesticides in urban areas

#### **Action**

- Incorporate bird nesting bricks and boxes into the outer walls of new buildings in Thamesmead
- Increase awareness to encourage residence with gardens to leave wild areas for insects to flourish to increase prey for house sparrows.
- Encourage public engagement and participate in garden birdwatch with RSPB.

## **Further Information**

**British Trust for Ornithology (BTO)** www.bto.org

### **RSPB**

www.rspb.org.uk





## Sand martin

The Sand martin (Riparia riparia) is a summer visitor, arriving in April and leaving to return to Africa in October. Sand martins are associated with wetland sites and forage over water, feeding on flying insects.

They are social birds and nest in colonies, digging burrows in sandy banks or cliffs. Sand martins have been recorded in Thamesmead and do breed in various locations along the Thames Estuary.

### Aim

To establish a breeding colony of sand martins in Thamesmead

#### **Threats**

- The loss of nesting sites and insect decline
- Drought in Africa (wintering grounds)

#### Action

- Create artificial nesting banks close to a lake or in the grazing marsh.
- Improvements to wetlands will increase prey availability

# **Further information**

British Trust for Ornithology (BTO) https://app.bto.org/birdfacts/results/bob9810.htm

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#### Black redstart

The black redstart (Phoenicurus ochruros) is a robin-sized bird. It has adapted to urban areas, especially post-industrial sites, particularly sparsely vegetated areas with stony ground. Its diet consists of invertebrates and seeds.

The black redstart is in the London BAP and the capital is a stronghold for this species. In recent years,

it has spread from the industrial sites of east London, towards the West End, often using extensive green roofs as feeding and breeding sites. There are fewer than 100 breeding pairs in the UK.

Black Redstarts are listed as Amber under the Birds of Conservation Concern 4: Red List for Birds (2015). Black redstarts have been recorded in various locations along the Thames Estuary.

# Aim

To create suitable feeding and nesting sites for black redstart in Thamesmead

#### **Threats**

Loss of habitat for breeding and foraging sites through the re-development

#### **Action**

- Install biodiverse extensive green roofs on new and existing buildings
- Maintain mosaics of different substrates with rough vegetation in open spaces (this will benefit other species such as reptiles)

# **Further Information**

## **RSPB**

https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/black-redstart/

### London black redstart action plan

https://www.blackredstarts.org.uk/





# Peregrine falcon

The peregrine falcon (Falco peregrinus) is a large falcon which often nests in cities. Tall buildings mimic their natural cliff edge nesting habitat.

Numbers have been recovering from the losses caused by the widespread use of DDT (which was banned in the 1970s). They feed primarily on pigeon and duck.

The peregrine falcon is protected in the UK under the Wildlife and Countryside Act, 1981 and classified as Green under the Birds of Conservation Concern 4: Red List for Birds (2015).

The peregrine falcon is a London BAP species with several pairs nesting in London. Peregrine falcon is occasionally seen hunting in the Thamesmead area.

# Aim

To encourage peregrine falcon to nest in Thamesmead

#### **Threats**

- Pesticides and accidental poisoning
- Illegal persecution
- The loss of nesting sites from re-development

# Action

- Nesting platforms to be installed on new or existing building over 20 meters tall where possible.
- Public engagement, including the use of nest cameras and monitor the breeding and fledging success rate

#### **Further Information**

## **London Peregrines:**

http://www.londonperegrines.com/home/index.php

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# **Grey Heron**

The grey heron (Ardea cinerea) is one of the UK's most familiar large wading birds. Grey herons are found throughout Britain and are associated with wetlands and slow-moving water.

They take fish, small mammals and invertebrates and nest in trees in colonies (heronries) beginning in early spring.

Classified in the UK as Green under the Birds of Conservation Concern 4: Red List for Birds (2015).

Grey herons are often seen feeding along Thamesmead's canals. There is a heronry at Tump 39.

## Aim

To maintain a thriving, breeding population of herons at Thamesmead

#### **Threats**

- The decline in water quality from pollution leading to a reduction in prey
- Disturbance of nesting birds

#### **Action**

- Identify tree groups on islands with the potential to become new heronries.
- Improve water quality
- Maintain fish stocks
- To engage with residents and schools to monitor breeding success at Tump 39, through the erection of cameras

## **Further Information**

British Trust of Ornithology (BTO) on grey heron: https://app.bto.org/birdfacts/results/bob1220.htm





## **Common Tern**

The common tern (Sterna hirundo) is a migratory waterbird, that is a summer visitor, from April through to August/September.

They often nest on islands or rafts within water bodies and their diet consists of small fish.

The Common tern is classified in the UK as Amber under the Birds of Conservation Concern 4: Red List for Birds. Breeding populations are found along the Thames and Severn.

Friends of Crossness Nature Reserve, RSPB Bexley Local Group and Bexley Bird Report have reported common terns at nearby Crossness, Belvedere and Erith Foreshore.

## Aim

To establish a colony of breeding common tern in Thamesmead

#### Threats

- Decline in fish stocks
- Nests are vulnerable to predation and damage from storms

## Action

- To establish nesting rafts on the lakes in Thamesmead.
- Increase stocks of young fish by improving habitat and water quality in lakes

## **Further Information**

# JNCC Seabird monitoring programme:

https://jncc.gov.uk/our-work/seabird-monitoring-programme/

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#### Reed warbler

The reed warbler (Acrocephalus sciraceus) is a summer visitor from Africa. Reed warblers arrive in April and are primarily found in Central and Southern England.

This species breeds in the UK nesting in dense reed beds. Their diet consists of insects and berries. Classified in the UK as Green under the Birds of Conservation Concern 4: Red List for Birds (2015).

Reed warblers are seen and heard in the reedbeds around Thamesmead, at Crossness Nature Reserve and the adjacent Erith Marshes.

#### Aim

To increase the population of reed warblers in Thamesmead

#### **Threats**

Loss of reed beds from natural succession, invasive species

### **Action**

- To monitor breeding reed warbler in Thamesmead
- Increase the area of existing reed beds and create new substantial reed beds where feasible

## **Further Information**

#### BTO on reed warbler

https://www.bto.org/our-science/projects/birdtrack/2018-look-out-reed-warbler





#### Water vole

The water vole (Arvicola amphibious) is a small mammal that lives in burrows within well-vegetated slow-flowing riverbanks, canals, lakes and ditches. Its diet consists of plant material.

The water vole has multiple litters from April through to September. It is a fully protected species under the Wildlife and Countryside Act 1981, as well as a Priority Species under the UK Post-2010 Biodiversity Framework.

Water vole populations are highly fragmented and it is one of the most rapidly declining mammal species in Britain.

Over 60 water voles were re-introduced in Thamesmead in 2002 off Western Way (Tilfen Land). Crossness Nature Reserve and the surrounding area now holds an important population for London.

#### Aim

To increase the population of water voles in Thamesmead

#### **Threats**

- Pollution of watercourses.
- Loss of wetland vegetation.
- Ingestion of rat poison.

# Action

- Water vole surveys to be carried out to establish the current population
- Improve water quality by introducing SuDS
- Remove concrete edges along canals and lakes with suitable vegetation and create reed-fringed ditchers to provide food and cover
- Investigate the possibility of establishing a reintroduction programme where suitable habitat exists.
- Establish a water vole awareness programme in local schools

## **Further Information**

**GiGL on London Water Vole Project:** http://downloads.gigl.org.uk/website/watervole.pdf

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## **European Hedgehog**

The hedgehog (Erinaceus europaeus) is a small spiny mammal found throughout the UK. Hedgehogs hibernate from November through to March under leaves, log piles and garden sheds.

Their diet consists of invertebrates, including beetles, slugs and worms. In urban areas hedgehogs are found in parks, gardens and along railway embankments where there is grassland, hedges, woodland and shrubs.

Hedgehogs have declined by a third during the last 20 years. It is protected under the Wildlife and Countryside Act, 1981 and is also a Priority Species under the UK Post-2010 Biodiversity Framework.

Hedgehogs are found in the boroughs of Greenwich and Bexley.

#### Aim

To establish a viable population of hedgehogs in Thamesmead

#### **Threats**

- The loss of suitable habitat by the removal of hedges
- Fatality in road traffic collisions, bonfires, drains and mowing accidents
- A decrease in invertebrate food supply with the increase in the use of insecticides and slug pellets
- Fencing which increases habitat fragmentation

#### Action

- Improve habitat connectivity through the creation of suitable habitat of rough vegetation and increase gaps in fences
- Increase education to local residents and schools to leave habitat piles as hibernation sites for hedgehogs to use in gardens and green spaces.
- Maintenance team to check before strimming and mowing of grass, especially in overgrown areas
- End use of biocides and slug pellets

## **Further Information**

**British Hedgehog Preservation Society** www.britishhedgehogs.org.uk

Peoples Trust for Endangered Species www.ptes.org





#### **Bats**

There are 17 species of bats in the UK. Bats are nocturnal with a diet consisting of insects, which they forage at night along tree lines and over watercourses.

Bats have requirements for specific sites for hibernation and roosting.

All species of bats are fully protected in the UK under the Wildlife and Countryside Act, 1981. The common pipistrelle, soprano pipistrelle and noctule bat have all been noted in the Thamesmead area.

#### Aim

To increase the diversity and size of bat population in Thamesmead

#### **Threats**

- Loss of hibernating, roosting and foraging sites
- Breaks in linear habitats used for commuting
- Artificial light affecting the distribution of prey availability and flight paths for foraging

## Action

- To monitor bats by installing smart grid of fixed bat detectors
- Install bat boxes in suitable locations in parks and new developments in Thamesmead
- Consider the impact of lighting on bats. Reduce light pollution and use bat-friendly lighting techniques
- Improve the quality and connectivity of habitat for bats in Thamesmead by tree planting

# **Further Information**

The London Bat Group www.londonbats.org.uk



www.peabody.org.uk