# MOOR LANE SPORTS GROUND: DESK STUDY

#### HABITATS

The site is situated in the context of other parkland, recreation grounds and also sits directly adjacent to the Witton Cemetery and the Jewish Cemetery and as such is located in a relatively low density urban area.

The Tame Valley Canal SLINC flanks the south western edge of the site and trees within the site contribute to the corridor habitat associated with the canal.

Also, several standing open water occur within a short distance of the site, including Witton Boating Lake SLINC, Perry Park Lake SLINC and the Brookvale Park Boating Lake. These areas are recognised as of value to waterfowl.

The River Tame SLINC and the Tame Valley Canal SLINC for continuous green corridors through the built up environment offering viable connectivity for fauna in the area.

### SPECIES

A number of bird records within the area were provided through consultation with the ecological database for Birmingham and the Black Country (EcoRecord). This indicated a number of notable species in the vicinity of the site including following species which are either UK or Local BAP species:

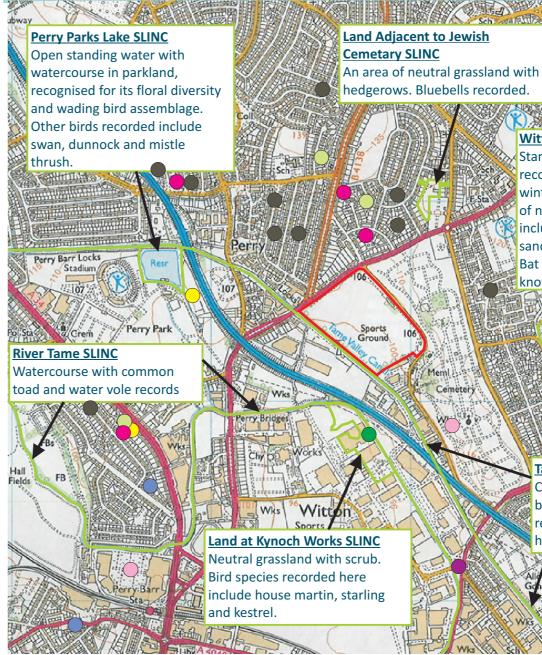
- yellow hammer
- starling
- house sparrow
- dunnock
- turtle dove
- kestrel
- black redstart

There is a diverse assemblage of moths known locally (close to the Jewish cemetery) due to a recorder in the area. A total of 29 UK BAP priority species of moth have been recorded as well as small heath butterfly (also a UK BAP) to the west of the site.

Smooth newt (local BAP species) are recorded to the north and west east of the site and a number of common frog records were scatterered throughout this area.

Hedgehog was also recorded to the east of the site.

### **DESIGNATED SITES & PROTECTED SPECIES RECORDS**





Perry Commor

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Witton Boating Lake SLINC Standing open water in parkland recognised as of value for wintering waterfowl. A number of notable birds recorded including redwing, song thrush, sand martin and yellowhammer. Bat foraging records are also known of at this location.

Tame Valley Canal SLINC Canal with grassland and broadleaved woodland. Bird records include turtle dove, nouse sparrow and starling.

# MOOR LANE SPORTS GROUND: SITE SURVEY

#### HABITATS

#### **IMPROVED GRASSLAND**

The site is a managed sports ground comprising an expanse of short sward improved grassland with a bowling green in the south east corner of the site.

#### **BUILDINGS AND HARD STANDING**

The sports centre building was a modern, brick built structure with glass and wooden panels. Associated car parking stretched along the eastern boundary. An astroturf court was recorded to the rear of the sports centre. A residential bungalow was recorded close to the bowling green.

#### TREES, ORNAMENTAL PLANTING, SCRUB & HEDGEROWS

Lines of mature poplar trees flank the southern and western edges of the site. Other trees recorded along the northwestern and eastern boundaries include wild cherry, small leaved lime, crack willow, silver birch and Scots pine trees. No veteran or near veteran trees were recorded. Ornamental planting and dense scrub were recorded around the car park. Hedgerows around the bowling green in the east of the site were of low species diversity comprising at least 80% native species.



### SPECIES

The trees, scrub, ornamental planting and hedgerows provide suitable habitats for breeding birds including local and UK BAP species.

The sports centre building did not offer any opportunities for roosting bats. The residential property was considered to provide a low degree of potential for roosting bats. In general, the trees within the site did not offer opportunities for roosting bats however at least two poplar trees next to the canal exhibited features such as cracks and lifted bark which provided low potential for individual bats to occasionally roost. Collectively the lines of poplar trees provided continuous linear canopy cover offering foraging and flight-lines for bats. All bats occurring locally are local BAP species, a number of which are also UK BAP species.

### PHASE 1 HABITAT PLAN



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## MOOR LANE SPORTS GROUND: ANALYSIS

#### **UK & LOCAL BAP HABITATS**

The intensive site management necessary for the functionality of this site as a sports facility limits the potential for UK and local BAP habitats in the central areas used for recreational activities.

The hedgerows around the bowling green in the east of the site comprised at least 80% native species and as such qualified as a UK BAP habitat.

The mature poplar trees along the southern and western boundaries contribute to the structure of the Tame Valley Canal SLINC corridor, a valuable link for wildlife in the local green infrastucture. Though the trees individually are not a BAP habitat, Canals are a local BAP habitat and the trees collectively are recognised as adding ecological value to the canal habitat.

#### **BIODIVERSITY ENHANCEMENT** RECOMMENDATIONS

The mature trees which flank the southern and western boundaries, though recognised as providing current biodiversity opportunities, are approaching the limit of their useful lifespan and are likely to experience natural structural failure in the coming years. It is therefore recommended that tree planting is initiated along these boundaries. Recommended species could comprise ash and oak standards and implementation during Oct-May 2010/11 or 2011/12 (avoiding frost prone periods) would allow these specimens to establish ahead of any loss of the existing stock.

The trees within this site should be regularly monitored and as and when surgery or removal is required it is recommended that the material is recycled to create log piles which will provide micro habitats suitable for invertebrates, small mammals and amphibians. This habitat creation has the potential to enhance the site for the following local and UK BAP species:

ennance the site for	the following loo	cal and UK BAP species.
	UK BAP Sp.	Local BAP Sp.
Common toad	Yes	Yes
Common Frog	Yes	Yes
Hodgobog	Voc	

- If any trees, shrubs, ornamental planting or hedgerows are to be removed for any reason, this should only be undertaken outside of the bird breeding season to avoid disturbance to this group. Equivalent replacement planting should be introduced if possible, using native species such as those listed above.

- Monitoring of mature trees is also encouraged within the Universities legal Duty of Care agreement. Whereby any tree surgery is required under this agreement, it may be necessary to consult a licenced bat worker to ensure no disturbance to roosting bats.

#### **UK & LOCAL BAP SPECIES**

Species recorded locally to the site included the following species which are UK and Local BAP species:

		UK BAP Sp.	Local BAP Sp.
Birds:	Dunnock	Yes	
	Starling	Yes	
	Kestrel		Yes
	Turtle dove	Yes	
	Black redstart		Yes
	Yellowhammer	Yes	
Mammals:	Hedgehog	Yes	
	Common pipistrelle	Yes	Yes
	Noctule bat		Yes
Inverts:	Moths (various)	Yes	
	Small Heath	Yes	
Amphibs:	Smooth newt		Yes

	Common Frog	Yes	Yes
	Hedgehog	Yes	
	Invertebrates	Possible	Possible
A consideration for diversification at this site would be to set aside an area at			
the periphery of the site, to be less intensively managed with a reduced			
mowing regime. To open up the sward by disturbing the existing perennial			
rye grass dominated grassland and introducing a seed mix incorporating			
species such as common bent, red fescue, meadow grasses, kidney vetch,			
solfhool and hird's foot trafail would create a more diverse habitat			

selfheal and bird's-foot trefoil would create a more diverse habitat, attractive to fauna including small heath butterflies (UK BAP species), which is locally recorded. To retain a tidy appearance, this area could be defined and fenced from amenity areas.



#### FURTHER SURVEY & RECOMMENDATIONS



# BOURNVILLE CAMPUS: DESK STUDY

#### HABITATS

No statutory or non statutory sites occur within or directly adjacent to the site, however Stocks Wood SINC is very close by, only separated by Maple Road.

The Worcester and Birmingham Canal SLINC is recognised as a continuous green corridor through the built up environment offering viable connectivity for fauna in the area. Canals are a local BAP habitat.

A number of the designated sites of interest in the surrounding area incorporate open water habitats and water courses (which are included under the BAP priority habitats of Ponds and Rivers respectively), such as the the Grounds of Woodbrook SINC, Griffin's Brook SLINC and the Elm Road Pool SLINC.

The historic village of Bourneville has a very "green" character and broadly the large garden habitats which surround the site are recognised as providing greater opportunities for biodiversity than typical inner city areas.

#### SPECIES

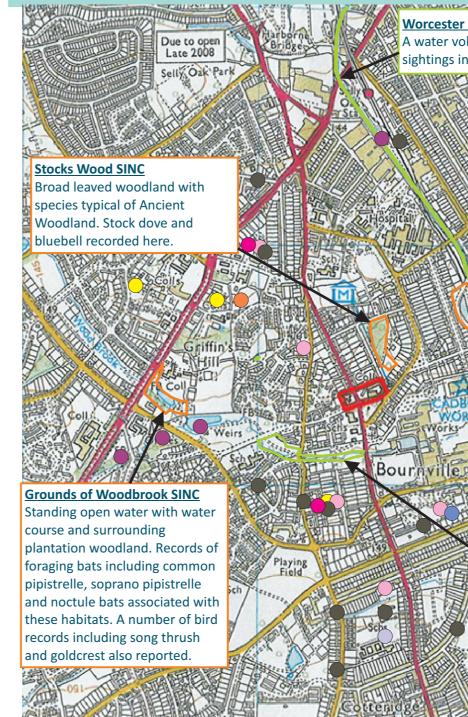
No known protected species records including any local or UK BAP species records corresponded directly with the site, though many UK and Local BAP species records occurred in the surrounding area.

A number of surrounding designated sites are merited on the presence of semi-aquatic species such as water vole and amphibians (including common toad, common frog and smooth newt, that are all local BAP species). There is not any connecting habitats to link the site to these aquatic habitats and no water courses or water bodies exist within the site. As such, these species are not viable within the site.

Records of roosting common pipistrelle, soprano pipistrelle and noctule are known within the area. It is noted that there are a number of old buildings in the immediate area, which would offer potentially suitable habitats for roosting bats.

A wall butterfly (UK and local BAP species)record was provided, which corresponded to a location just a few hundred metres north east of the site.

### DESIGNATED SITES & PROTECTED SPECIES RECORDS



Hedgehog Badger Common toad Watervole Common Pipistrelle Common frog Smooth newt

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Worcester & Birmingham Canal SLINC A water vole record and a number of bird sightings including grey wagtail and dunnock.



#### Elm Road Pool SINC

Standing open water with water course and surrounding broad leaf woodland. Breeding smooth newt and grass snake records associated with these habitats. Also common toad, water vole and a number of bird records including reed bunting and swallow also reported.

> Land off the Bourn SLINC An otter sighting reported near here in 2005.

Griffin's Brook & The Bourne SLINC Water course and surrounding scrub Records of kingfisher and water vole associated with the watercourse. Bluebells and common spotted orchid recorded. A number of bird records including starling and song thrush also reported.

# BOURNVILLE CAMPUS: SITE SURVEY

#### HABITATS

The majority of the site comprised buildings and hard standing and as such habitat diversity within the site boundary was limited. Improved grassland, ornamental planting and mature trees were also recorded.

#### **BUILDINGS AND HARD STANDING**

Ruskin Hall was a two storey brick building with a tiled pitched roof with parapet gables. An area of car parking wrapped around the western side of this building. The Maple Road building surrounded a central landscaped courtyard and again was two storey, brick built though part of this was a more recent extension.

#### IMPROVED GRASSLAND, ORNAMENTAL PLANTING, HEDGES AND TREES

Both buildings were fronted with improved grassland with mature trees (including small leaved lime, crack willow and yew) and bordered by managed native and non native hedgerows. The courtyard of the Maple Road building contained raised ornamental beds and a small area of improved grassland. The frontage of this building was fringed by ornamental borders.



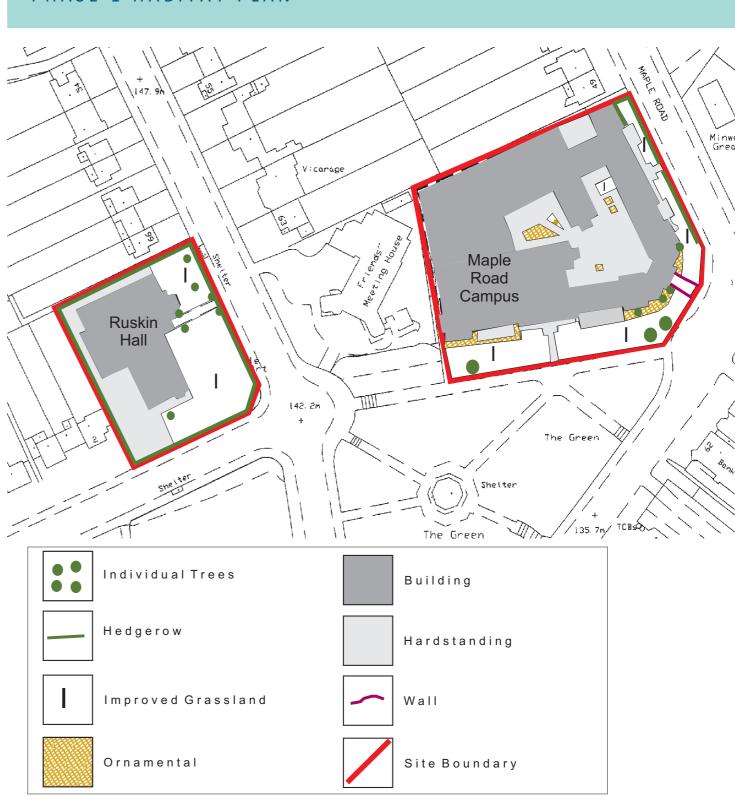
#### SPECIES

Trees and buildings within the site provided limited opportunities for roosting bats due to their well maintained condition.

Anecdotal evidence from grounds keepers suggested badgers may forage in the locality of the site, however no evidence of badger was recorded during the survey.

The ornamental planting, hedgerows and mature trees offered nesting opportunities for breeding birds.

#### PHASE 1 HABITAT PLAN







## BOURNVILLE CAMPUS: ANALYSIS

#### UK & LOCAL BAP HABITATS

The majority of the site comprised well maintained buildings and hardstanding which limited habitat diversity within the site boundary.

The hedgerows around Ruskin Hall comprised at least 80% native species and as such qualified as a UK BAP habitat.

Habitats surrounding the site including Stocks Wood SINC, the Worcester and Birmingham Canal SLINC and Griffin's Brook SLINC all provide suitable foraging habitats for bats and birds. These are recognised as UK BAP habitats.

#### **UK & LOCAL BAP SPECIES**

Species recorded locally to the site, which are potentially viable within and immediately surrounding the site included the following UK and Local **BAP** species:

	UK BAP Sp.	Local BAP Sp.
Birds: Dunnock	Yes	
Starling	Yes	
Song thrush	Yes	Yes
House sparrow	Yes	
Mammals: Hedgehog	Yes	
Common pipistrelle		Yes
Soprano pipistrelle	Yes	Yes
Noctule	Yes	Yes
Amphibs: Smooth newt		Yes
Common toad	Yes	Yes
Common Frog		Yes

Other UK BAP species for which records occur locally to the site include otter, water vole, grass snake and reed bunting, however due to lack of suitable habitats / lack of suitable connectivity, these species would not be viable within the site. Therefore it is not realistic to consider biodiversity enhancements for these species within the site.

Wall butterfly, though recorded locally and freely mobile, prefers dry, unfertilised grassland with bare patches, a habitat which is not present on site and would be challenging to create given the space and situation available at this site.

### **BIODIVERSITY ENHANCEMENT** RECOMMENDATIONS

As the majority of the site is building and hardstanding and colonisation of species is limited by a lack of continuous connectivity with naturalised habitats, it is recommended that any biodiversity enhancements at this site ,focus on bats, birds and flying insects.

Bird species recorded in the local area to this site, which are UK and local BAP species (as listed left) utilise general habitats including hedgerows and scrub for foraging and nesting. It is therefore suggested that all existing hedgerows, trees and shrubs are retained. However starling and house sparrows will utilise nest boxes and it is suggested that nesting opportunities within the site could be enhanced by erecting nest boxes suitable for these species, details of which are provided on page 11.

Soprano pipistrelle, noctule bats and common pipistrelle are known to be present in the area. Though it is recognised that the buildings on site are well sealed and offer limited roosting opportunities, potential roost sites could be provided by erecting specialist bat boxes, details of which are provided on page 11.

#### FURTHER SURVEY & RECOMMENDATIONS

- If any trees, shrubs, ornamental planting or hedgerows are to be removed for any reason, this should only be undertaken outside of bird breeding season to avoid disturbance to this group. Equivalent replacement planting should be introduced if possible, using native species such as those listed above.

- Monitoring of mature trees is also encouraged within the Universities legal Duty of Care agreement. Whereby any tree surgery is required under this agreement, it may be necessary to consult a licenced bat worker to ensure no disturbance to roosting bats.

- If any extension or roofing works are necessary on any of the building within this site, further guidance from a licenced bat worker should be sought, prior to works to ensure there is no disturbance to roosting bats.



# SCHOOL OF JEWELLERY: DESK STUDY

#### HABITATS

The canals are the only habitats designated for their nature conservation value in the Jewellery Quarter. Canals are a local BAP habitat and all carry SLINC designation. There are no other statutory or non statutory designated habitats within 1Km of the site.

This site is situated in the heart of the city, completely surrounded by high density urban environment and therefore habitats of nature conservation value are limited due to lack of naturalised environments.

#### SPECIES

Sightings of Black redstarts (Local BAP species) are recorded throughout this area of the city, including a record in Vittoria Street itself in 1995. There are multiple records over a number of years with indications of successful breeding in this area until at least 2007. This is a significant record as it is estimated that there are fewer than 100 breeding pairs in Britain. Typically this species nests in industrial or inner city locations, preferring to nest on buildings, especially more open situations such as on factories, warehouses, railway stations etc.

Other species of birds recorded in the area include linnet, dunnock, house sparrow and starling which are all UK BAP species.

Common pipistrelle bat records were also provided. Though this species is provided with statutory protection, it is not a UK or Local BAP species.

Badgers have been sighted to the north west of the site within 2Km. Though this species is provided with statutory protection, it is not a UK or Local BAP species.

#### **DESIGNATED SITES & PROTECTED SPECIES RECORDS**





# SCHOOL OF JEWELLERY: SITE SURVEY

#### HABITATS

This site is situated within a high density urban environment and comprised almost entirely of building and hard standing. A very small amount of ornamental planting was recorded to the rear of 85-87 Vittoria Street.

The central sections of the building at 82 Vittoria Street was the original School of Jewellery building and all other sections were later additions of differing styles, ages and construction. Essentially all red brick, three storey buildings, they were all well maintained with sections of flat, pitched and glass roofed areas.



### SPECIES

The structure of the ornamental planting offered limited nesting opportunity for breeding birds.

The buildings within the site were well maintained and no features which offered opportunities for roosting bats were recorded.

No statutory protected species, local or UK Bap species or any habitats to support such speices were recorded within or immediately adjacent to the site.

### PHASE 1 HABITAT PLAN



Birmingham City University Biodiversity Survey



# SCHOOL OF JEWELLERY: ANALYSIS

#### UK & LOCAL BAP HABITATS

No local or UK BAP habitats are recorded within the site. Due to the lack of natural habitats and urban location, habitat opportunities are very limited.

Opportunities for nesting or roosting bats and birds were not recorded in association with the buildings on site.

## UK & LOCAL BAP SPECIES

Species recorded locally to the site, which are potentially viable within and immediately surrounding the site included the following UK and Local BAP species:

	UK BAP Sp.	Local BAP Sp.
Birds: Black redstart		Yes
Linnet	Yes	
Dunnock	Yes	
Starling	Yes	
House sparrow	Yes	
Mammals: Common pipistrelle		Yes

### BIODIVERSITY ENHANCEMENT RECOMMENDATIONS

If any further extensions to any of the buildings at this site are intended in the future, brown roofs should be considered as a design option. Given the urban location and limited space available at sites such as this, features such as green and brown roofs provide an opportunity to utilise the structures to enhance biodiversity. In this case, brown roof habitat would enhance potential nesting opportunities for the local black redstart population. Unfortunately the existing buildings would not appear suitable for retro fitting green or brown roofing.

Habitat enhancements for bird species recorded locally to this site, which are UK and local BAP species, such as linnet and dunnock are difficult as typically they utilise generalist habitat such as hedgerows and scrub for nesting and foraging and due to the limited space at this site, this form of habitat creation is not feasible. However, black redstart, starling and house sparrow will utilise nest boxes and therefore nesting opportunities for these species can be enhanced through erection of species specific boxes as detailed on page 11.

Common pipistrelle are known to be present in the area. Though it is recognised that the buildings on site are well sealed and offer limited roosting opportunities, potential roost sites could be provided by erecting specialist bat boxes, details of which are provided on page 11.

#### FURTHER SURVEY & RECOMMENDATIONS

- If any extension or roofing works are necessary on any of the building within this site, further guidance from a licenced bat worker should be sought, prior to works to ensure there is no disturbance to roosting bats.

- Any sightings of black redstart should be reported to EcoRecord to contribute to their survey data, monitoring the success of this species in the local area.

## SUMMARY & CONCLUSIONS

#### SUMMARY

No statutory or non statutory sites of nature conservation value occur within sites assessed as part of this report. The Tame Valley Canal SLINC borders the Moor Lane Sports Ground. The only statutory protected species known to occur within any campus were badger and bluebell at City South Campus. Potential for a number of birds, mammals, amphibians and invertebrates including UK and Local BAP species was identified across all sites and recommendations of how such species could be encouraged to use sites provided through suggested biodiversity enhancement measures.

#### $\mathsf{CONCLUSIONS}$

In terms of protection of existing habitats, recommendations include:

- avoid disturbance of any potential bird nesting habitat (hedgerows, trees etc) in bird breeding season (March August inclusive)
- monitoring and appropriate management of trees in accordance with the University legal Duty of Care agreement with any surgery respecting the potential for roosting bats and / or nesting birds and a licensed bat worker consulted if necessary.
- continuation of invasive weed control (namely at City South Campus).

Where there is opportunity for enhancements for biodiversity value, recommendations include:

- bat and bird box erection
- bat boxes incorporated to new buildings during construction where appropriate
- selected areas enhanced through species rich grassland or pond / wetland creation to enhance opportunities for birds, mammals, amphibians and invertebrates including UK and Local BAP species.
- diversification of existing habitats including ornamental planting and additional woody planting with native species.
- woody material generated from tree surgery recycled to create log piles to enhance habitats for

Birmingham City University Biodiversity Survey

