Leicestershire 2010

Watermead Country Park
30th – 31st May 2010

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The organisers would like to thank all partners involved in the organisation of the event; and particularly members of the public and the surveyors and volunteers who gave their time to take part in the event, and without whom Leicestershire Bioblitz 2010 would not have been possible.

Executive Summary

The first ever Leicester and Leicestershire Bioblitz Event was held at Watermead Country Park (North and South) on May Bank Holiday (30th-31st May 2010). The aim of the event was to encourage people to record wildlife at the Park. This was seen as a way of making people more aware of the types of flora and fauna to which they live near and also to provide a database to inform on how the Park could be managed more effectively in the future to safeguard the wildlife and habitat types.

The event was run in partnership between the City and County local authorities, Groundwork Leicester and Leicestershire, Stepping Stones, The Leicestershire and Rutland Wildlife Trust and the BBC. A target of 500 species was set to provide a goal to aim for over the 24 hours and maintain peoples' interest as to whether this was achievable. Teams of staff based at two base camps in the North and South of the Park kept a tally of species counts on display to the public. The BBC filmed and recorded the event for TV and radio and a live broadcast was made throughout Monday from early hours to the end of the event at 5.00 p.m. to report on the findings. At the end of the event a total of 535 species had been counted, but this increased to a staggering 653 species once all the record sheets were collected and specimen samples identified. The total included 200 flowering plants, 85 species of moth, 149 other invertebrates, 77 species of birds and 44 lichens.

Approximately 1600 members of the public attended and supported the event. They took part in guided walks and recorded wildlife on I-Spy sheets. A total of 87 sheets were returned and resulted in 90 species of flora and fauna being recognised. Approximately 50 naturalists took part in the event over the 24-hour period, made up of professionals and serious amateurs with an in-depth knowledge of a broad range of species. Some of the naturalists led guided walks which included wild flowers, pond-dipping, slugs and worms, bats, amphibians and butterflies.

More species were found in the North than the South of the Park during the event; some species were not recorded although their presence had previously been confirmed, and several species were recorded for the first time within the Park suggesting that the distribution of more mobile species may be changing.

Recommendations are to hold more Bioblitz events around Leicester and Leicestershire following the full support and acknowledgement of its success through the recently awarded Green Life Prize (December 2010).

1. Introduction

1.1 Background to the Bioblitz Event

Bioblitz events have been gaining in popularity since first appearing in the USA in the early 1990s, and have now spread across the globe with Bioblitz recorded in the Americas, Australia, New Zealand and Europe. 2010 has been designated as the International Year of Biodiversity, which has raised public awareness of the importance of understanding more about the wildlife on our doorsteps.

The concept of Bioblitz events is still in its infancy in the UK, although the interest and wish to raise awareness of the importance of biodiversity has been a main aim of many organisations since the Rio Summit (1992) and publication of the UK Biodiversity Action Plan (1994). Leicester, Leicestershire and Rutland were the first region in the UK to produce a local Biodiversity Action Plan (BAP) which acted as a template for other organisations to produce similar reports for their own areas which identified habitats and species in significant decline in their areas. Since then Leicester has produced a City BAP 2006-2009 and 2010-2020 which has identified habitats and wildlife that are particularly relevant to the City.

One of the main aims of the new City and Local County BAPs is to raise awareness of biodiversity and to increase public participation through the inter-action with wildlife and habitats as well as encouraging people to record the nature they see. The initial suggestion to hold a Bioblitz was put forward by the BBC Springwatch campaign team, whom the Leicester City Council had worked successfully on previous events. Opportunities to promote biodiversity locally and enthusiasm from partnership organisations to endorse the BBC “Wild Days Out” and a Leicester/Leicestershire large Bioblitz Event received full support. Planning for the event commenced in February 2010.

Watermead Country Park was chosen to host the Bioblitz as it covers a large area with a range of habitat types managed by both the Leicester City and Leicestershire County Councils (see Section 2). The timing of the event (30th – 31st May) coincided with both the start of the BBC’s 2010 Springwatch, the BBC’s Wild Days Out campaign and a popular annual event in the county end of Watermead Country Park – the “Wildlife on Your Doorstep” Event hosted by the Stepping Stones Project.

A target level of 500 individual species of flora or fauna seen and recorded was set as a realistic figure that it was hoped could be achieved during the event.

1.2 Partners in Bioblitz

The main partners in Leicestershire Bioblitz 2010 were Leicester City Council (LCC), Leicestershire County Council (Leics CC), Groundwork Leicester and Leicestershire (GWLL), Leicestershire Stepping Stones Project, the BBC and Leicestershire and Rutland Wildlife Trust (LRWT).

1.3 Publicity

Leicestershire Bioblitz 2010 was publicised widely by the BBC in the run up to and during the course of the event, with several radio and television pieces broadcast. This occurred both nationally through the Springwatch and Wild Day Out campaigns and locally via the huge support received from BBC Radio Leicester and East Midlands Today programmes. Live broadcasts were made throughout the event and the morning show (9.00 a.m. – 12 noon) was completed as an outside broadcast from the event Basecamp on Monday 31st May.

Figure 1.1: BBC Radio Leicester Morning Programme Broadcast from Watermead Country Park South Monday 31st May 2010 (copyright B Ingram, LCC)

The event was also widely publicised nationally on the Bioblitz website (http://www.bnhc.org.uk/home/bioblitz/) and locally via LCC, Leics CC, GWLL, LRWT and Stepping Stones websites. Articles publicising the event appeared in the local press and posters were placed around the Park to notify visitors of the forthcoming event. The County Recorders network also publicised the event at meetings, in newsletters and via local natural history interest groups.

Figure 1.2: Bioblitz Poster Advertising the Event Locally Within the Park

1.4 Funding

The BBC, LCC and Leics CC all contributed funds towards running the 2010 Bioblitz event. Generous "in kind" contributions were made by LCC, Leics CC and GWLL for staff time, organisation of the event, running the day and compilation and analysis of data and report writing after the event.

1.5 Participation

Two basecamp locations were set up in the North and South of the Park as focal points for information and data returns. These were open throughout the event as a centre for members of the public to meet the specialists, examine specimens found and to ask questions about the wildlife and park generally.

An "I – spy" quiz sheet was produced to encourage the public to record wildlife on the day through identification of a number of common plants and animals previously observed in the Park (see Appendix I) A prize draw was offered to participants completing the forms and returning them to the base camps as well as additional prizes and "give-aways" offered by the BBC, Environment Agency and Leicester City Council (See Section 3).

Leicestershire Bioblitz 2010 was particularly well supported by a number of professional and volunteer naturalist groups and individuals who either independently collected records and/or lead guided walks (see Section 4).

1.6 Displays and Information

Due to the size of the chosen location, Leicestershire Bioblitz had two basecamps, one in the South and one in the North (running alongside Wildlife on Your Doorstep) of Watermead Country Park.

On the day a range of information was provided at both of the basecamp locations. Guidebooks, key charts and microscopes were available to aid with identification to species level and a range of sampling resources (nets, traps, collecting pots etc) were provided by Leicestershire and Rutland Environmental Resource Centre (LRERC) (Holly Hayes) for use over the 24 hours.

Figure 1.3: Base camp with tables of specimens (copyright LCC)

The Environment Agency, Riverside Rangers (Parks), BBC, GWLL, University of Leicester and LCC had information displays at the Southern basecamp which provided information on local wildlife in and around the Park. In the North the Bioblitz basecamp formed a part of the larger "Wildlife on Your Doorstep" event which had information and displays available from Leics CC and the County Collections as well as local groups such as BTCV and LRWT.

An ongoing tally of the total species count was also displayed at both basecamps throughout the event to show the progress towards the target set at 500 species.

2 Watermead Country Park

The Park as a whole comprises of Watermead Country Park South managed by Leicester City Council and Watermead Country Park North managed by Leicestershire County Council. The park as a whole has a strong sense of place with its wetland character. The water features are the most prominent aspect of the park and is one of the most important wildlife sites in the City that connects directly with the County to provide a strategic natural green space for wildlife.

A foil of mature and semi-mature trees and shrubs form a backdrop to the open expanses of water, with reeds and other flora and meadow grassland creating a rich mosaic of habitats for wildlife to thrive. The park itself is part of the much wider Soar Valley floodplain that encompasses many other lakes and nature reserves.

Figure 2.1: Aerial Photograph of Watermead Country Park

The Park was designated as a Local Nature Reserve (LNR) in March 2005 and also forms a gateway to the City of Leicester as the Northern most part of Leicester's Riverside. The park is widely appreciated by the surrounding communities attracting regular visitors from both the city and the county.

Figure 2.2: Watermead Country Park (South) copyright B Ingram LCC

The park has been developed from a former gravel extraction area which created the large lakes and wetland areas that form a ribbon of open water adjacent to the canalised River Soar. The area is particularly important for migrating birds and associated wetland fauna and flora which has become established over a relatively short period (approximately 20 years) since the extraction ceased and the park was created.

The park is surrounded by residential housing, businesses and new development, but has maintained its scenic beauty and air of tranquility despite its proximity to Leicester. It is as such loved by the locals and a welcome surprise to new visitors to the park.

3 Participation

3.1 Public Involvement and Wildlife Recording

A total of over 1600 members of the public attended the Bioblitz event over the course of the 24-hour period. This was separated into 600 people in the South and over 1000 people in the North (where Bioblitz was running in conjunction with the well established "Wildlife on your Doorstep" event).

Figure 3.1: Group of young people participating at Bioblitz (copyright H Sykes, BBC)

Family groups were encouraged to work together to make wildlife records using an "I-Spy" tick sheet (Appendix I) containing the photos of 12 common species (a mixture of birds, plants, insects and trees) easily seen at Watermead. There was also space on the sheet to record any other species seen and recognised. Participants were encouraged to return the completed sheets by inclusion in a prize draw from all the returned sheets. It was made clear to the families that they did not have to see all the 12 species to be entered for the prize draw.

Figure 3.2: Group of young people completing I-Spy sheets (copyright H Sykes, BBC)

3.2 Guided Walks

A wide range of guided walks were also organised for most of the 24 hour period of the Bioblitz across the whole of the Park. These ranged from bat and moth walks in the evening/night of 30th May; to bird watching, wildflower identification, pond-dipping and worm hunting on 31st May. Table 3.1 shows the full range of guided walks and approximate number of participants during the Bioblitz event.

Table 3.1: Range of Guided Walks during Sunday 30th May 2010

Time	Topic	Location	Number of people participating
17.00 – 19.00	General safari	South only	5-8
17.00 - dusk	Base camp	South only	30
21.00 – 23.00	Bats moths and amphibians	South	15-20
Dusk - late	Moths	South	15-20
Dusk - late	Newts	South	15-20
Dusk - late	Bats	South	15-20
20.30 – 22.30	*Bats moths and amphibians*	*North*	*30*
20.30 - late	*Moths*	*North*	*30*
20.30 - late	*Bats*	*North*	*30*

Table 3.2: Range of Guided Walks during Monday 31st May 2010

Time	Topic	Location	Number of people participating
09.00 – 16.30	Self guided wildlife walks	North and South	87
09.00 – 17.00	Bioblitz Base camp	North and South	1600
09.00 – 11.00	Morn Chorus	South	15
10.00 – 11.00	Wild flower walk	South	0
11.00 – 12.00	Pond dip	Ecology park	12
11:30 - 12:30	Insect walk	South	8
14.00 – 15.00	Wild flower walk	South	10-15
14.00 – 15.00	Pond dip	South	20
15.00 - 16.00.	Pond dip	South	12
05.00 – 07.00	*Dawn Chorus*	*North*	*2*
10.00 – 11.00	*Wild flower walk*	*North*	*0*
11.00 – 12.00	*Pond dip*	*North*	*8*
12.00 – 13.00	*Invertebrates*	*North*	*2*
13.00 – 14.00	*Worms*	*North*	*6*
14.00 – 15.00	*Wild flower walk*	*North*	*5*
15.00 – 16.00	*Pond dip*	*North*	*12*

3.3 Naturalists and Experienced Surveyors

More than 50 experienced professional and amateur naturalists took part in the recording for the Leicestershire Bioblitz. This included members of the local Leicester Botanical Society of the British Isles (BSBI) group, Leicestershire and Rutland Ornithological Society, Birstall Birdwatching Society, Loughborough Naturalists and several VC 55 County Recorders. Individuals employed as professional ecologists, conservation officers and researchers from the local authorities, GWLL, LRWT and Universities of Nottingham, Leicester and De Montfort University also recorded species during the event.

Figure 3.3: Volunteer naturalist surveying during Bioblitz event (copyright B Ingram, LCC)

3.3.1 Recording Forms and Site Maps

Recording forms and site maps were prepared in consultation with a county recorder with many years experience and expertise in a range of groups. The recording form was based on that used by the BSBI (Appendix II) with maps prepared for the South and North (Appendix III and IV) of the Country Park. This assisted in the identification of areas in the park where species were observed and also to encourage surveys to be more evenly distributed across the Park. In species groups where there were likely to be many records found (for example plants), recorders used the Vice County (VC) 55 (Leicestershire and Rutland) pro-forma lists.

3.3.2 Accuracy of Information and Verification

The specialist surveyors were self-policing in the accuracy of their data with a number of recorders taking specimens away on the day, to confirm identifications at a later stage when they were able to consult with national experts or compare with voucher specimens. These surveyors were made up of County recorders (specialists in groups of species e.g. mammals, higher plants, lichens, lepidoptera) and experienced surveyors/recorders whose records were generally accepted as verified by the Leicestershire and Rutland Environmental Record Centre (LRERC).

Any data found to be inconclusive (for example a non-standard common name used by a recorder noting down a record out of their usual field of expertise) were removed from the lists during sorting and analysis.

3.3.3 Surveying Techniques

The methodologies followed best practice and standard techniques when and where possible. The range of data collected may have been in part due to the professional equipment made available from LEREC. This included newt torches for recording amphibians by torch light; a range of pond-dipping and invertebrate nets, bat detectors, GPS survey equipment, field identification sheets and field guides.

Botanists used the standard VC 55 recording sheet and tetrad squares (see Appendix III and IV for Watermead South and North squares and maps). Where these were not available, botanists used the standard recording sheet designed for the Bioblitz event (Appendix II).

Bats were recorded using hand-held bat detectors which recorded the presence of bats using echo-sound and specialists identified the sounds to species level. An anabat recorder was also used to record the echo-sounds and software analysed the sounds to confirm bat species identification.

Small mammal traps (longworth and plastic small mammal traps) were used to trap mammals. These were baited with appropriate food (meal worms, nuts and fruit) and bedding (straw). They were set up at dusk on the Sunday evening and checked again within 7 hours the following morning.

Figure 3.4: Wood mouse in small mammal trap (copyright LCC)

Invertebrates were trapped using sweep nets and jars. Specimens were only taken where analysis after the event was necessary for verification of species.

4. Results

4.1 Public Participation Results

The public reported a good range of groups including birds, plants, insects, amphibians, molluscs and mammals. I-Spy sheets recordings resulted in 90 different types of wildlife; 24 of which were recorded in both the North and the South of the park; 39 in the South only and 27 in the North only. Table 4.1 shows the types of wildlife recorded.

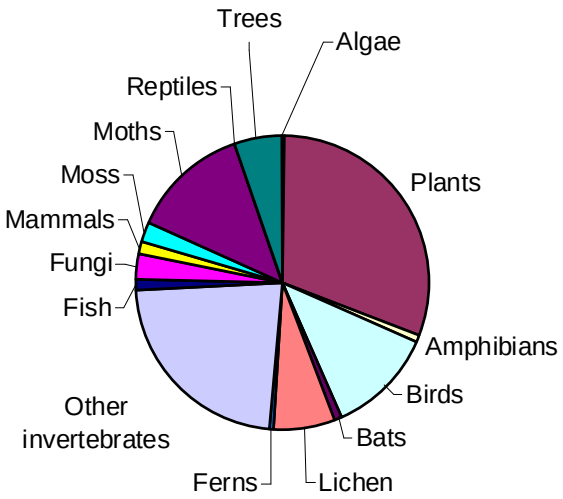
Table 4.1: Wildlife Recorded on I-Spy Sheets by the Public During Bioblitz Event May 30th-31st 2010

North and South	Number	North only	Number	South only	Number
Ant	6	Black backed gull	2	Bean goose	1
Bramble	4	Black headed gull	2	Beetle	1
Canada goose	5	Blue tit	1	Black bird	1
Carrion crow	6	Brown butterfly	1	Blossom	2
Clover	4	Cygnets	2	Blue bell	2
Cormorant	3	Dock	1	Blue bottle	1
Cow parsley	5	Goslings	1	Blue butterfly	1
Daffodil	4	Hawthorn	3	Coot	1
Daisy	2	Heron	5	Cowslip	1
Damselfly nymph	2	Lapwing	2	Farmyard goose	1
Dandelion	2	Moorhen	7	Giant daisy	1
Dog rose	6	Oak	2	Gnats	1
Duck	10	Plantain	1	Goose grass	1
Goose	7	Pond skaters	3	Grass hopper	2
Ladybird	3	Ragged robin	2	Grey heron	1
Leech	2	Shelduck	2	Greylag goose	1
Magpie	3	Stinging nettle	1	House martin	1
Mallard	7	Teasel	1	Lily pad	3
Nettle	3	Thrush	1	Long tailed tit	1
Red campion	2	Tufted duck	2	Midges	1
Sand martin	3	Vetch	1	Mouse	4
Snail	2	Water cress	1	Newt	1
Wasp	3	Water lily	1	Pigeon	3
Yellow iris	8	Water snails	2	Pink footed goose	1
		White throat	2	Pochard	1
		Wood pecker	1	Red clover	1
		Woody nightshade	2	Reeds	1
				Sedge warbler	1
				Sparrow	1
				Spider	2
				Squirrel	1
				Swallow	1
				Swift	1
				Tadpole	1
				Water mite	1
				White butterfly	1
				White dead nettle	1
				Willow	2
				Wood ant	1

4.2 Results – Overall for Park

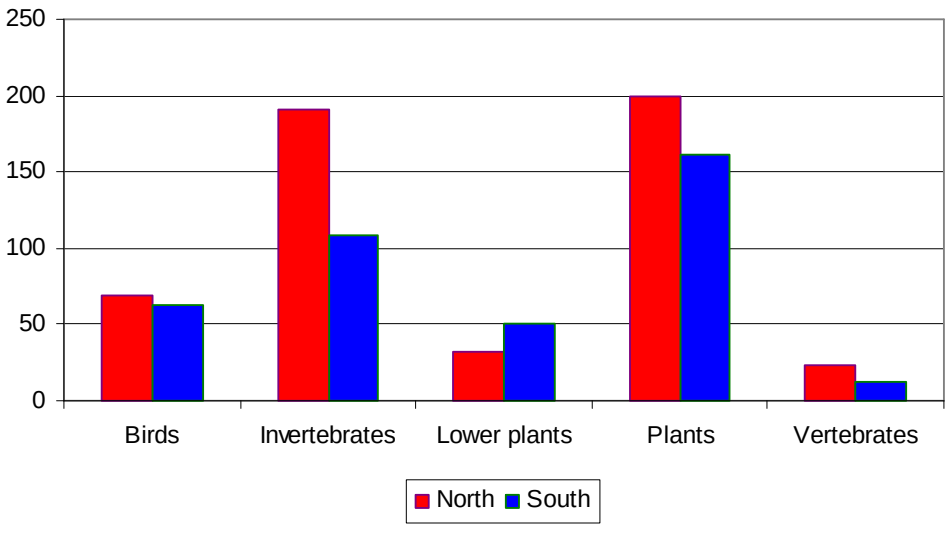
The total number of species recorded at the 2010 Leicestershire Bioblitz was 653, easily passing the target number of 500 set before the event commenced. The total included 200 flowering plants, 85 species of moth, 149 other invertebrates, 77 species of birds and 44 lichens (Figure 4.1). The full set of data and individual groups and those species recorded in the North or South of the park only are in Appendix V.

Figure 4.1: Species recorded at the 2010 Leicestershire Bioblitz



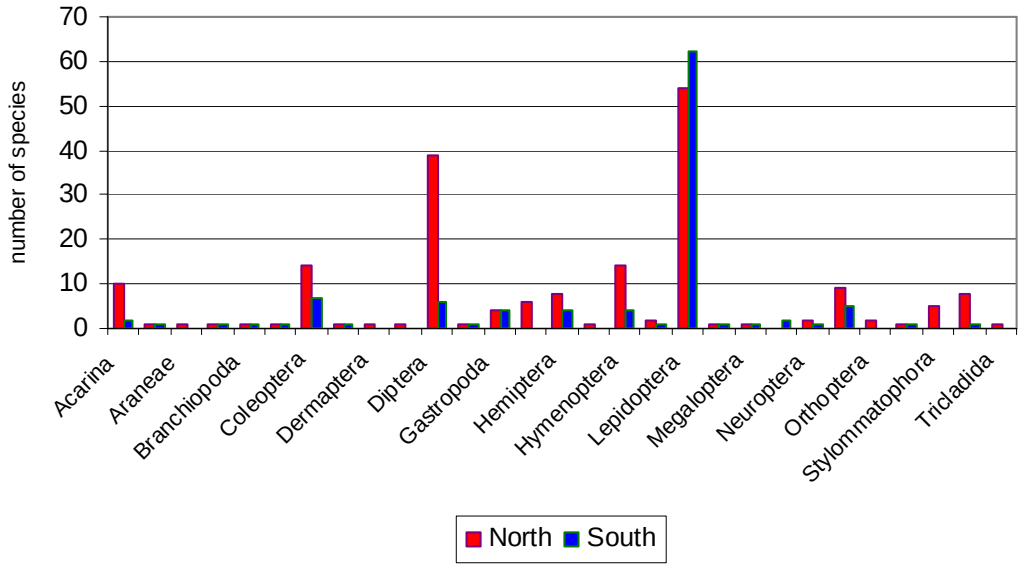
A total of 516 species were noted in the North of the park with 395 found in the South. Figure 4.2 shows the number of species found in each of the major groups at Watermead Country Park. The broad group "lower plants" includes algae, mosses, lichens, ferns and fungi.

Figure 4.2: Numbers of birds, invertebrates, lower plants, flowering plants and vertebrates found at the North and South of Watermead Country Park



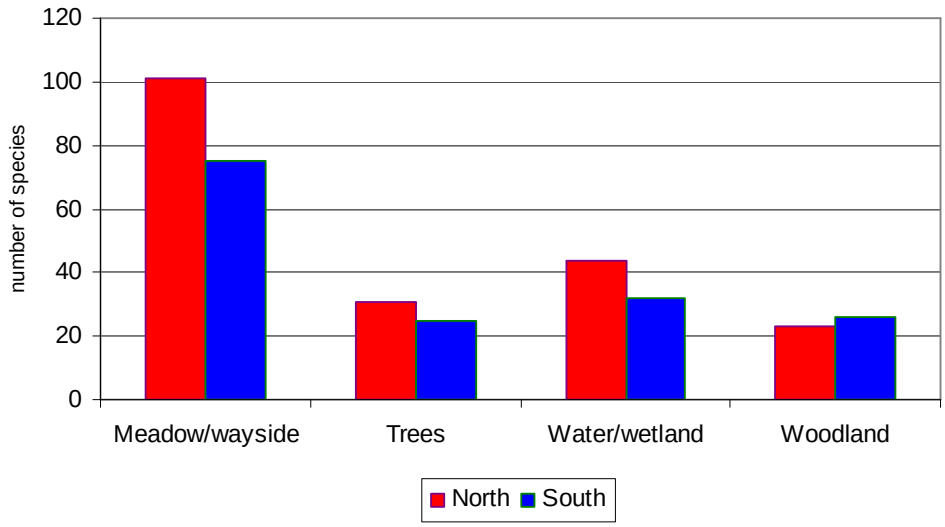
A total of 191 invertebrates were recorded in the North and 108 in the South. The largest invertebrate Order recorded were the Lepidoptera (moths and butterflies) with overnight moth traps resulting in 54 species in the North and 62 species in the South of the park. Almost 40 Diptera (flies) were recorded in the North. Many of the other invertebrate Orders were represented by less than five species (Figure 4.3).

Figure 4.3 Numbers of species of invertebrate Orders recorded in the North and South of Watermead Country Park



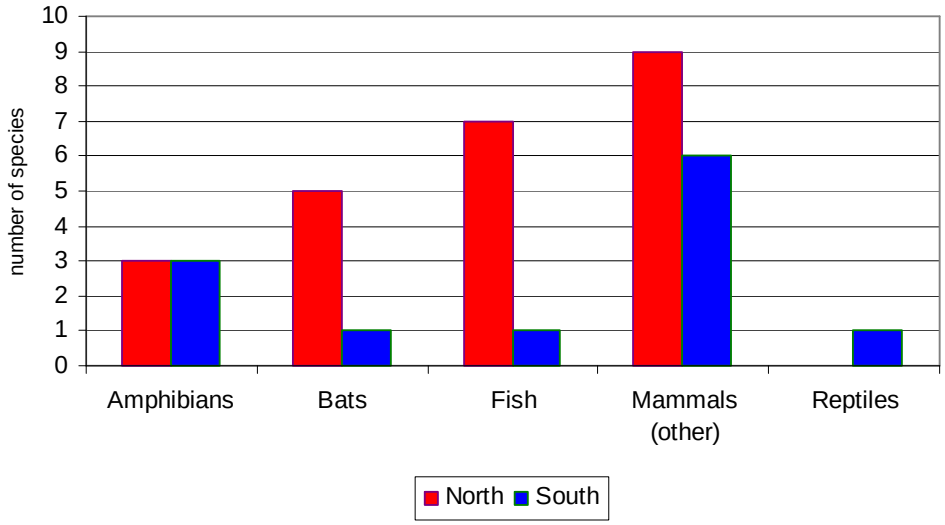
A total of 199 species of flowering plants were recorded in the North of the park and 158 species recorded in the South. The flowering plants were subdivided into the informal groups of trees, meadow/wayside plants, water/wetland plants and woodland plants dependant on the habitat in which they were observed (Figure 4.4).

Figure 4.4: Number of species of plants recorded at Watermead Country Park during the 2010 Bioblitz divided into informal habitat types



A total of 24 species of vertebrates were recorded in the North of Watermead and 12 species recorded in the South including one sighting of a reptile (grass snake) (Figure 4.5)

Figure 4.5: Number of species of vertebrates recorded at Watermead Country Park during the 2010 Bioblitz divided into informal groups



5. Analysis

5.1 Public Participation Analysis

The most common types of wildlife seen by members of the public in both the North and South were ducks and yellow iris (Table 5.1), in the South only they were “mouse” and “lily pads” (Table 5.2) and in the North were moorhens and herons (Table 5.3).

The information was provided by a total of 32 families who returned I-spy sheets in the South, and 55 families in the North of the country park.

Table 5.1: Most frequently seen wildlife in the whole of Watermead Country Park during the Bioblitz

Wildlife seen by the public	Number of observations
Duck	10
Yellow iris	8
Goose	7
Mallard	7

Table 5.2: Most frequently seen wildlife in the South of Watermead Country Park during the Bioblitz

Wildlife seen by the public	Number of observations
Mouse	4
Pigeon	3
Lily pad	3
Spider, willow, blossom, bluebell, grasshopper	2

Table 5.3: Most frequently seen wildlife in the North of Watermead Country Park during the Bioblitz.

Wildlife seen by the public	Number of observations
Moorhen	7
Heron	5
Pond skater	3
Hawthorn	3

5.2 Duplication of Records in North and South of Watermead Country Park

Many of the species recorded were seen at both the North and South of Watermead during the 2010 Bioblitz. However, many were only observed and identified by specilaists working from one of the basecamp locations. Figures 5.1 – 5.3 show the number of species identified by the specialists whose records have been verified. Appendix V lists the data set of species recorded during the Bioblitz.

Black = species recorded at North and South of the park;

Red = species recorded at North of park only

Blue = species recorded at South of park only

Figure 5.1, Numbers of species of invertebrate Orders recorded in both ends of Watermead Country Park, or only in the North or South

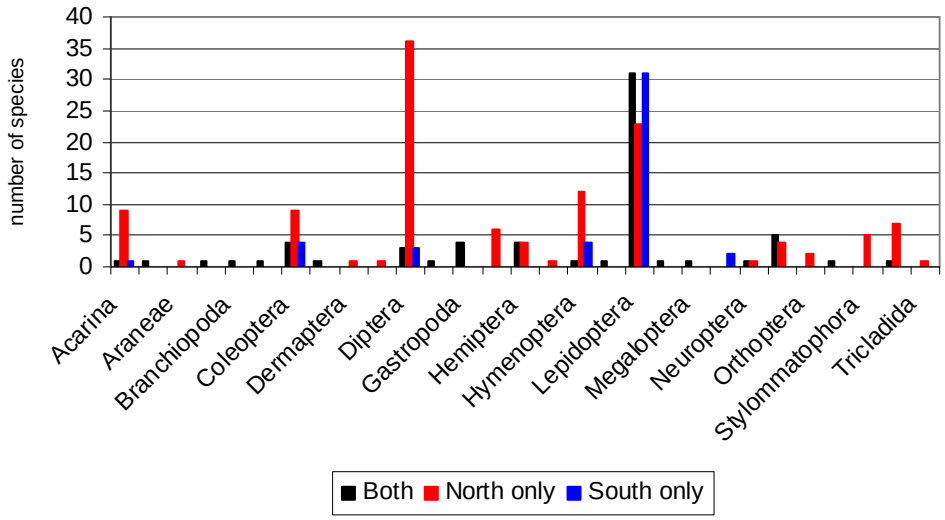


Figure 5.2: Numbers of species of flowering plant recorded in both ends of Watermead Country Park, or only in the North or South

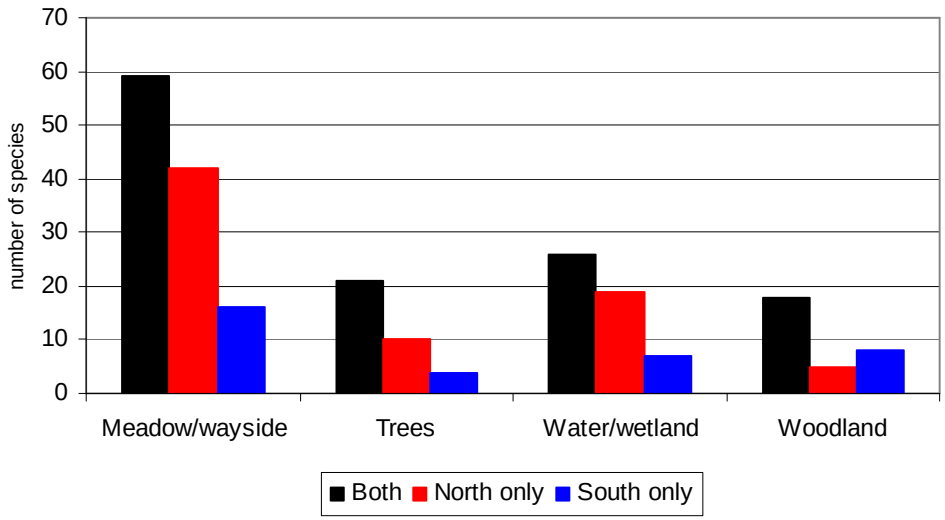
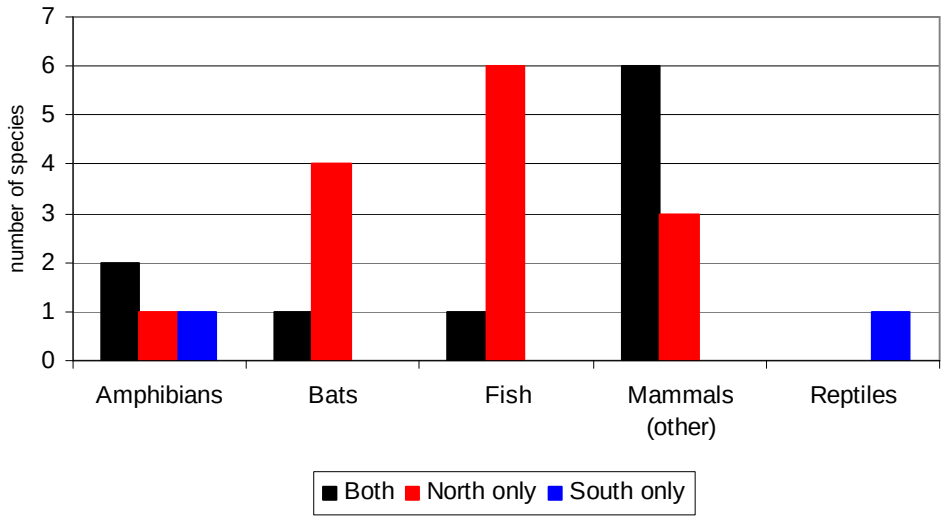


Figure 5.3: Numbers of species of vertebrates recorded in both ends of Watermead Country Park, or only in the North or South



6. Discussion

6.1 Public Participation

Public participation in the event was facilitated by the opportunity to enter a prize draw for every family who returned an I-spy sheet. This encouraged a good level of participation in the event. Most families recorded additional species to those pictured on the sheet (Appendix I), and no species were recorded that were not also observed by the experienced surveyors during the event.

In general, participation in the guided walks was very good. Following a particularly wet Bank Holiday Saturday, the weather on the Sunday evening was dry, overcast and windy, but still encouraged approximately 20 people joining in the hunt for bats, newts and moths in the South of the park and 30 people in the North.

On the Monday the pond dipping sessions all proved to be very popular as people had the chance to get their hands wet looking for invertebrate life. More pond-dipping sessions were added in the South of the park at safe sites close to the base camp due to popular demand.

Figure 6.1: Pond dipping session at Watermead Country Park South (copyright LCC)

Figure 6.2: Specimens on display (copyright LCC)

Samples such as damselfly nymphs, dragonfly larvae, freshwater shrimps and hog louse were brought back to the base camp and added to the display trays for the general public to examine. These, together with specimen samples of damselflies enabled facilitators to explain the life-cycle of some species – all from a table top.

The wildflower walk to the beautiful wet meadow near the Southern end of Watermead was also well attended and provided an opportunity for the public to see the diversity of plants and associated fauna within a small area of the park.

Guided walks were not well supported during the morning at both basecamps, for example, the Monday 10am walk at both the North and South basecamps proved to be a lull in public attendance. This may be partly due to the day being a Bank Holiday Monday and people wanting to stay longer in bed together with the Northern end of the park dual event of "Wildlife on Your Doorstep" not starting until 12noon.

The feedback from the walk leaders was that they had enjoyed interacting with the public and would be happy to assist in a similar event in subsequent years, and the smiling faces of the public who participated told its own story!

Although organisers tried to encourage people to book on the guided walks in advance (particularly the night bat and moth walks for health and safety reasons), relatively few people took the opportunity. Many joined the walks when visiting the base camps after seeing them advertised. This made it difficult on occasions for organisers to start the walks at stated times. Reasons for not being able to book in advance could have been caused by a software malfunction on the Groundwork website and availability of partnership staff to answer phone calls after 5.00 p.m. on the Friday prior to the event commencing on the Sunday. All the guided walks were free of charge and some members of the public may have also been waiting to see what the weather conditions were before committing themselves to visiting the park.

6.2 Species Groups

6.2.1 Birds

The records made of bird species present were the most closely matched of all the data collected on the day with a large majority (55 out of 77) of species being observed both North and South of the park. Birds are obviously more mobile than most of the other species recorded.

Figure 6.3: Swans at Watermead Country Park South (copyright LCC)

Specialists were also available and well spread across the park with many of the members of LROS concentrating their efforts to the North, while other experienced birders covered the South of the park.

The “dawn chorus” guided walk was carried out at 5 a.m. and although poorly attended by members of the public, it did result in a reasonable number of birds being recorded. The “morn chorus” walk in the South of the park did not set off until 9 a.m. This allowed for a more leisurely start and was well attended. It enabled less experienced birders to make out individual songs amongst the cacophony of the morning songs. However, the different timing of the walks did not make much of a difference to the recorded observations. The number of species recorded was probably assisted by the proximity of a range of habitats which included water, woodland, hedgerow and grassland which enabled both water fowl, hedgerow and grassland species of birds to be seen by walking only a short distance from the basecamp.

A highlight of the bird watching for the event was the impressive display of swifts put on for several hours in the South of the Park on the Sunday evening and Monday – the birds aerobatics as they swooped and dived above the lake catching flying insects being a sight hard to beat. The end of the 24 hour Bioblitz event was well marked in the North by the hatching of the first cygnet of the swans nest that was close by the “Wildlife on your Doorstep” and basecamp event site.

6.2.2 Invertebrates

The most popular of the guided walks in both the North and South of the park was the pond dipping sessions to find aquatic invertebrates. Many of the samples found could only be identified to Genera rather than species level on the day, as full determination requires detailed examination and/or dissection with a microscope.

Figure 6.4: Invertebrates collected and taken to base camps for identification (copyright LCC)

However, some samples were taken back to the basecamp in the South of the park where they could be examined by a wider audience including members of the public who did not wish to join the actual pond dipping sessions.

The data collected was not of sufficient calibre to assess the water quality because of the range of non-standardised pond dipping techniques used by the “dippers” as well as the incomplete identification of some of the samples. The main aim of the guided walks however was to bring people closer to nature and allow them to find a number of aquatic creatures for themselves and this was achieved. The results of the surveys of the small ponds and lakes were very positive and will contribute towards recommendations for future work at Watermead by land managers.

The weather was poor for moth trapping (quite cold and gusty wind) and the recorders at both ends of the park were a little disappointed with the relatively low numbers of species found. However, the guided walks were enjoyed by the visitors who were encouraged to participate and were shown a range of species caught on the night.

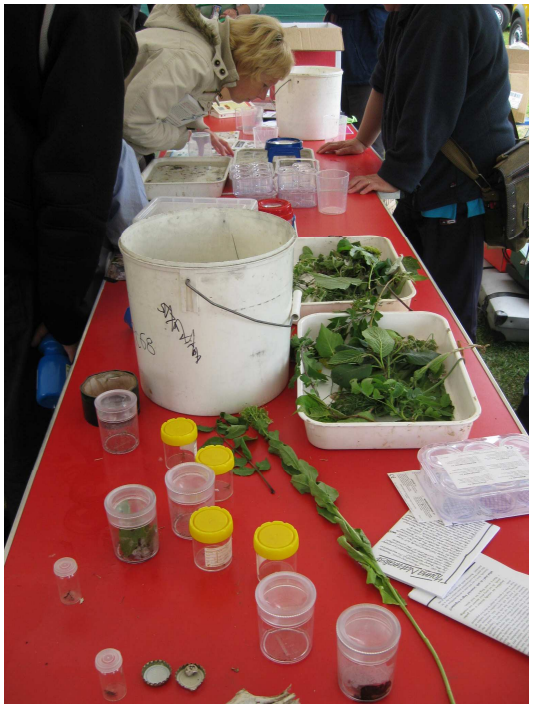
The moth traps in the North of the park yielded a new County Record for Leicestershire, the Netted Pug Moth (*Eupithecia venosata)* which had previously only been recorded in the Rutland area of VC55 (Figure 6.5)

Figure 6.5: Netted pug moth (copyright Graham Finch)

More invertebrates such as diptera, hoverflies and bees were recorded in the North of the park than in the South. This may not be because such species were absent from the South, but more likely due to the distribution of specialist recorders, several of whom recorded exclusively in the North of the park. This makes it difficult to draw any firm conclusions over the variability in the data between the two basecamp locations.

6.2.3 Plants

There were a high number of plant species recorded in both the North and South of the park. These were quite general species mainly associated with grassland/meadow areas and no species of national or local rarity were found during the event. Generally, more species of plants were recorded in the North, but this may have been caused by a greater number of naturalists concentrating on this area rather than the plants being absent from the South.



Areas in the South such as the "brownfield" site (site with previous industrial use) behind the main car park were an area that was under-recorded in plant diversity compared to previous data of plants recorded. Species such as Viper's bugloss (*Echium vulgare*) were not recorded in this area despite having been noted the previous year. This is probably because the area was not surveyed by specialists due to staffing resources and other areas being surveyed in preference.

Figure 6,6: Plant specimens at basecamp collected for identification (copyright LCC)

Other plants were also not recorded on site despite their presence being known from previous data records and observations. This was possibly due to seasonal differences such as early-flowering plants (e.g. violets) having gone over and being too early for many of the summer wildflowers. It is, however, accepted that the Bioblitz provided a "snapshot" of a wide range of species over a particular 24 hours and the results provided this information well.

Trees have been separated out from the higher plant data to distinguish the type of habitat and diversity of species found in both the North and South. A similar number of tree species were found at both sites, perhaps as the species of trees are more readily identifiable than some lesser-known plant species.

The higher plant data have been separated out into specific types: meadow grassland; wetland and woodland flora (see Figure 5.2) to identify the species richness and diversity associated with each habitat type. By doing so, further use can be made of the data to inform on appropriate management of the sites to conserve or enhance the number of species on site and identify priorities for particular areas.

6.2.4 Mammals

The mammal group has been separated into bats and "other mammals" because of the number of species of bat that could have potentially been recorded at the Park during the evening in association with the different habitats available for foraging and commuting from roosts.

The total number of mammals (excluding bats) across the park was recorded as 9 species. These included mammals that were seen at the park such as fox (*Vulpes vulpes*), brown rat (*Rattus norvegicus),* wood mouse (*Apodemus sylvaticus*), short-tailed field vole (*Microtus agrestis*) and common shrew (*Sorex araneus*).

Figure 6.7: Record of badger identified from print (copyright B Ingram LCC)

However, some of the records of mammals were recorded from the identification of field signs by specialists. These included the presence of badger (*Meles meles*) confirmed from the identification of badger setts, latrines and prints and mink (*Neovison vison*) through paw prints and scats.

A number of species were not recorded although their presence had been recorded within the last few years across the park. These included otter (*Lutra lutra*) whose field signs were searched for by staff from the Environment Agency along the River Soar and canal to the South of the park and harvest mouse (*Micromys minutes*).

Numbers of small mammals caught in the mammal traps were disappointing, but this is likely to have been caused by a number of factors including staffing resources to place traps out, bait and set them, and return for checking and recording. Ideally, the traps would have been placed out several days before the event with them not being set to let animals get used to their presence. The traps would then have been baited and set in-situ and checked the following morning. Because of staffing resources, site security, numbers of available traps and disturbance of traps during the event, it was not possible to put the traps out several days in advance. This, together with the wet and cold weather of the previous few days may account for the low numbers of mammals caught in traps.

Some mammal field signs are difficult to identify such as harvest mouse nests at the time of year; water shrews where hair tubes and other methods of searching could have been employed. These would have been difficult to place out on site due to the high risk of disturbance during a public event.

Bat records were noted during the guided walk events in the North and South of the park. A more diverse range of species were recorded in the North of the park, possibly due to the range of habitats visited during the survey compared to the South where the habitats were mainly woodland and included one part of the lake only. In the South only common Pipistrelle bats were recorded, whereas in the North all three Pipistrelle were recorded (Nathsuis's, Soprano and Common) as well as Daubenton bats which largely forage for insects over water. The range of species was quite low compared to previous records of bats at the park and this may have been due to the prevailing weather conditions (cool temperature and windy conditions) which could have affected the behaviour and flight patterns of foraging bats.

6.2.5 Amphibians and Reptiles

The amphibians were searched for by torch light in a series of ponds in the South of the park. This formed part of a guided walk during which common species such as smooth newt (*Lissotriton vulgaris*), Common frog (*Rana temporaria*) and Common toad (*Bufo bufo*) were found. Aquatic invertebrates to Genera level were also noted and their presence confirmed again during the pond dipping sessions the following day.

A grass snake (*Natrix natrix*) was seen in the South of the park during the event, but not noted in the North despite one having been filmed by the BBC Wildlife cameraman a few

days before the event. The low records of reptiles is probably due to the increased disturbance during the event, cool weather conditions without sun which would not encourage basking and that no refugia was placed out (e.g. corrugated metal sheets) to encourage reptiles to seek cover.

7 Conclusion

7.1 How Did It Go?

The general concensus of people that took part in Leicester and Leicestershire's first ever Bioblitz is that it was a great success which managed to be fun, educational and productive. Feedback about the organisers and guided walk leaders were that they were friendly and enjoyed instructing volunteers and the public in search techniques. In addition to teaching the public about ecology, field sampling and biodiversity; the other main aim of the Bioblitz was to collect new information about biodiversity across the whole park and from a whole range of species.

Many common flowering plants, trees and vertebrates were confirmed during the event, but perhaps more importantly many new invertebrate species and lichens were added to the list of resident fauna and flora. This success was particularly due to the large number of specialists, both professional and serious amateurs that had the field skills, knowledge of animal behaviour and habitats, and identification skills that ensured a successful outcome. The 500 species to be identified over 24 hours was an ambitious target to set and this was achieved and following confirmation of specimen samples collected on the day, raised the total to a massive 653 species.

The surveyors and guided walk leaders indicated that their time was well used and that they appreciated the opportunity to put their skills to the test and participate in a public event that would also contribute to how the park could be managed in the future. The data sheets were generally completed well and provided additional information on the locations of surveys and where these were concentrated.

7.2 Recommendations

The following recommendations are made resulting from the Bioblitz and data collected:

- All data be forwarded to Leicestershire and Rutland Environmental Record Centre (LRERC) and for records to be updated electronically and made publicly available at an agreed resolution so as to protect sensitive records;
- All County recorders to be provided with a final list of species and tetrads where located;
- Copies of the report be circulated electronically to nature conservation groups and organisations; local authorities and individual recorders;
- The report is used to inform on future management at the park and contribute towards maintaining the recently achieved Green Flag status.

7.3 Opportunities for the Future

Since the Bioblitz event many people have asked “When are you doing the next one?” and this assumption that there will be another Bioblitz in Leicester or Leicestershire is welcomed. Building on the experience of holding the first Bioblitz the partners are aware of some of the organisational issues of holding such a large event and this will make for smoother running for any subsequent events held. Some of the obvious questions to consider in holding another event are:

- WHERE – consider the sensitivity of the site; infrastructure (car parks, footpaths, access etc for coping with large numbers and access of the public);
- WHEN - a time when weather will be favourable to encourage a greater number of species to be seen; encourage the public to attend; during or outside public holidays; conflicting/combining with other major events locally or nationally;
- WHO – partners involved may depend on the site location; availability of professionals and amateur naturalists; proximity of schools, universities etc to participate;
- PUBLICITY – reaching and informing as many people as possible – using as many ways as possible;
- COST – the scale of the event and partners involved may depend on funds available;

Many sites of wildlife importance are present around Leicester and Leicestershire. Country and City parks, Local Nature Reserves and Local Wildlife Sites exist on publicly owned land, The Leicestershire and Rutland Wildlife Trust have a range of attractive nature reserves that vary in size and diversity, whilst other private landowners such as the University of Leicester have both land and people-power to hold a mini-bioblitz of their own. Opportunities are many, enthusiasm is high and desire is strong to hold another Bioblitz event regularly and to encourage the people of Leicester and Leicestershire to find what wildlife lives on their doorstep.

APPENDIX I – I-SPY SHEET

Take a walk around the lake at Watermead and see what you can see…

Mute swan. ☐

Reed bunting. ☐

Great crested grebe. ☐

Buttercup. ☐

Cleavers/Goose grass. ☐

Reed mace. ☐

Bumble bee. ☐

Dragonfly. ☐

Orangetip butterfly. ☐

Alder tree. ☐

Willow. ☐

Ash. ☐

Please note down any other species you see.	Full name: Address: Phone number: E-mail:

Please give this sheet back in to be entered for the prize draw.

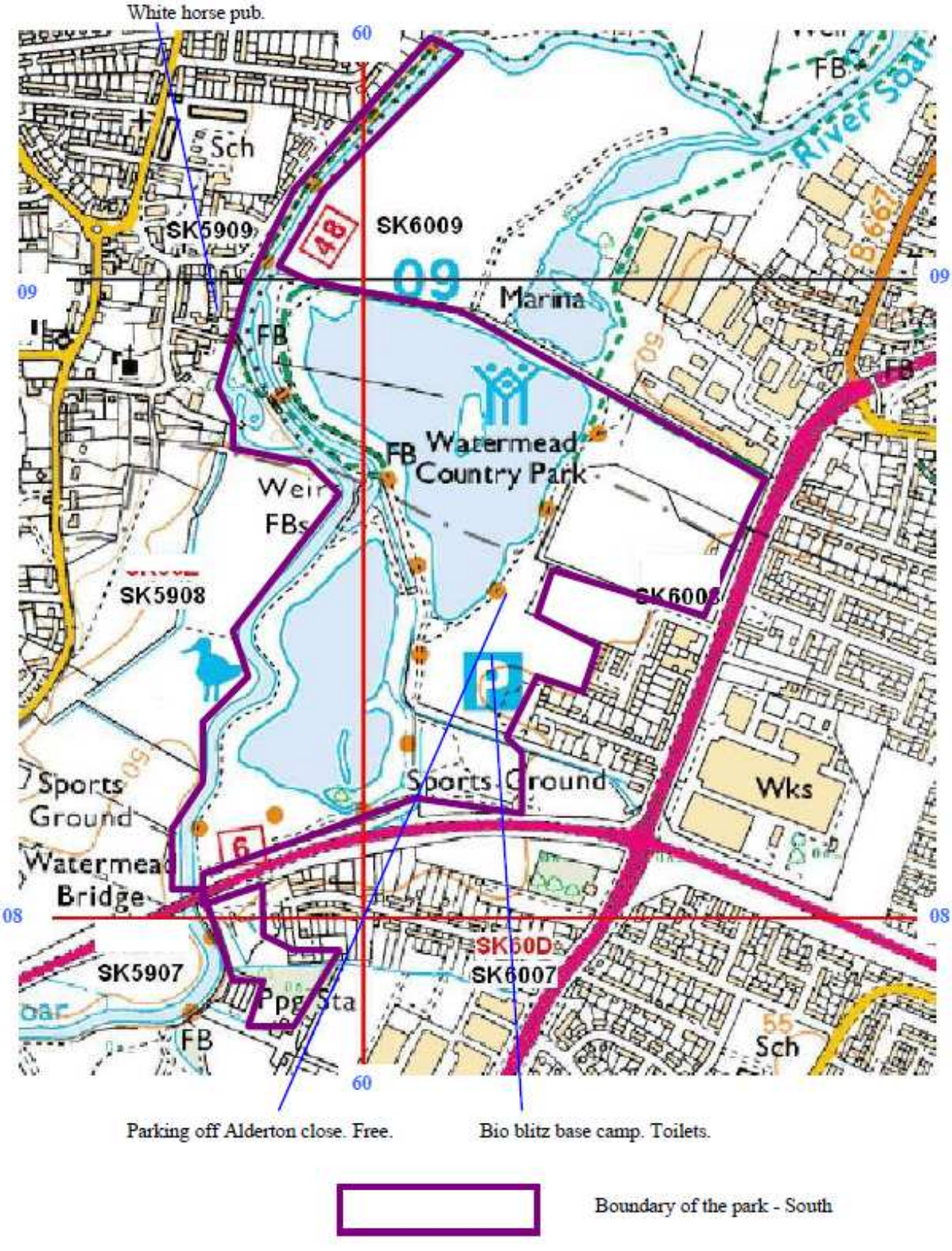
APPENDIX II – VC 55 COUNTY RECORDING SHEET

Vice County	Name of Locality
55	Watermead Country Park North/South. ✡
Date 30 – 31st ✡	Mark on map (reverse) which km square you surveyed and/or list habitat types surveyed e.g. grassland, woodland, wetland.
Please us a separate record sheet for each km square	
	Recorder (s)

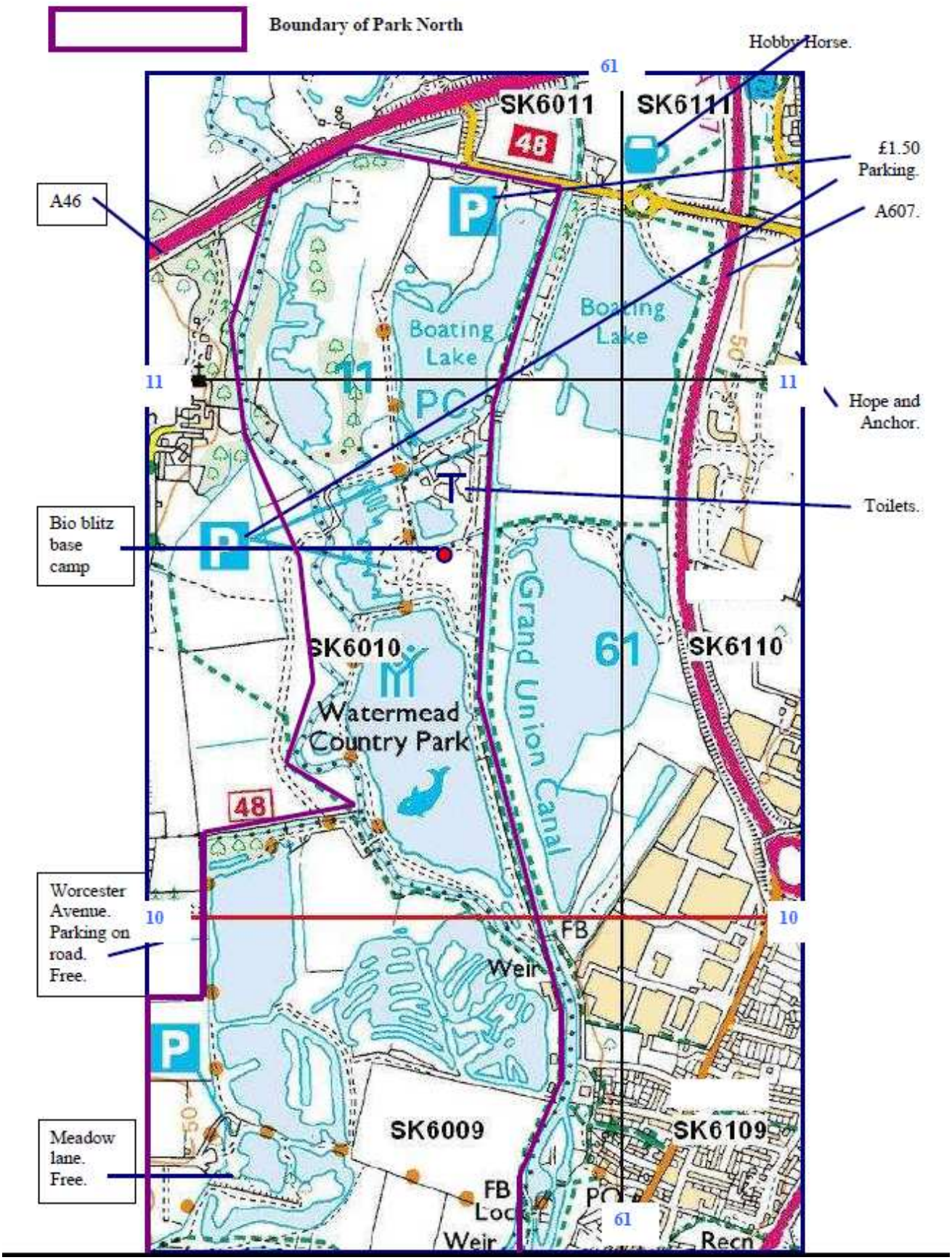
Species list (note grid reference or approx location of any notable species)	**Grid reference.**

Please hand this sheet back in at the end of the session. If for any reason you do not hand this back in please send to Leah Collins, Parkfield, Western Park, Leicester LE3 6HX. 01162220222. Leicesterinfo@groundwork.org.uk. ✡ Delete as required.

APPENDIX III – MAP OF WATERMEAD COUNTRY PARK SOUTH


White horse pub.
Sch
SK5909
SK6009
48
09
Marina
FB
River Soar
B667
Watermead Country Park
Weir
FBs
SK5908
SK6008
Sports Ground
Wks
Watermead Bridge
6
08
SK5907
SK6007
Pgs Sta
55
Sch
60
Parking off Alderton close. Free.
Bio blitz base camp. Toilets.
Boundary of the park - South

APPENDIX IV – WATERMEAD COUNTRY PARK NORTH MAP


Boundary of Park North
Hobby Horse.
£1.50 Parking.
A607.
A46
Hope and Anchor.
Toilets.
Bio blitz base camp
Worcester Avenue. Parking on road. Free.
Meadow lane. Free.
SK6011
SK6111
SK6010
SK6110
SK6009
SK6109
Boating Lake
Boating Lake
Watermead Country Park
Grand Union Canal
Weir
Weir
FB
FB
PC
PC
48
48
61
61
11
11
10
10

APPENDIX V – LIST OF SPECIES IDENTIFIED DURING BIOBLITZ

ACROSS WATER MEAD COUNTRY PARK NORTH AND WATERMEAD SOUTH

Black = seen in **both** North and South
Red = seen in North **only**
Blue = seen in South **only**

Table 1: Birds

Scientific Name	Common Name	Group	Group - detail
Accipiter nisus	Sparrowhawk	Birds	Birds
Acrocephalus schoenobaenus	Sedge warbler	Birds	Birds
Acrocephalus scirpaceus	Reed warbler	Birds	Birds
Aegithalos caudatus	Long tailed tit	Birds	Birds
Alcedo atthis	Kingfisher	Birds	Birds
Anas clypeata	Shoveler	Birds	Birds
Anas crecca	Teal	Birds	Birds
Anas platyrhynchos	Mallard	Birds	Birds
Anas strepera	Gadwall	Birds	Birds
Anser anser	Greylag goose	Birds	Birds
Anser anser (farmyard hybrid)	Greylag hybrid (farmyard type)	Birds	Birds
Apus apus	Swift	Birds	Birds
Ardea cinerea	Grey heron	Birds	Birds
Athene noctua	Little owl	Birds	Birds
Aythya fuligula	Tufted duck	Birds	Birds
Branta canadensis	Canada goose	Birds	Birds
Buteo buteo	Buzzard	Birds	Birds
Cairina moschata	Muscovy duck	Birds	Birds
Carduelis cannabina	Linnet	Birds	Birds
Carduelis carduelis	Goldfinch	Birds	Birds
Carduelis chloris	Greenfinch	Birds	Birds
Certhia familiaris	Tree creeper	Birds	Birds
Cettia cetti	Cettis warbler	Birds	Birds
Charadrius dubius	Little ringed plover	Birds	Birds
Columba livia (domest.)	Feral pigeon	Birds	Birds
Columba oenas	Stock dove	Birds	Birds
Columba palumbus	Wood pigeon	Birds	Birds
Corvus corone	Carrion crow	Birds	Birds
Corvus monedula	Jackdaw	Birds	Birds
Cuculus canorus	Cuckoo	Birds	Birds
Cygnus olor	Mute swan	Birds	Birds
Delichon urbicum	House martin	Birds	Birds
Dendrocopos major	Great spotted woodpecker	Birds	Birds
Emberiza schoeniclus	Reed bunting	Birds	Birds
Erithacus rubecula	Robin	Birds	Birds
Falco subbuteo	Hobby	Birds	Birds
Falco tinnunculus	Kestrel	Birds	Birds
Fringilla coelebs	Chaffinch	Birds	Birds
Fulica atra	Coot	Birds	Birds
Gallinula chloropus	Moorhen	Birds	Birds
Haematopus ostralegus	Oystercatcher	Birds	Birds

Scientific Name	Common Name	Group	Group - detail
Hirundo rustica	Swallow	Birds	Birds
Larus fuscus	Lesser black backed gull	Birds	Birds
Larus ridibundus	Black headed gull	Birds	Birds
Locustella naevia	Grasshopper warbler	Birds	Birds
Motacilla alba	Pied wagtail	Birds	Birds
Netta rufina	Red crested pochard	Birds	Birds
Parus caeruleus	Blue tit	Birds	Birds
Parus major	Great tit	Birds	Birds
Parus montanus	Willow tit	Birds	Birds
Passer domesticus	House sparrow	Birds	Birds
Passer montanus	Tree sparrow	Birds	Birds
Phalacrocorax carbo	Cormorant	Birds	Birds
Phasianus colchicus	Pheasant	Birds	Birds
Phylloscopus collybita	Chiffchaff	Birds	Birds
Phylloscopus trochilus	Willow warbler	Birds	Birds
Pica pica	Magpie	Birds	Birds
Picus viridis	Green woodpecker	Birds	Birds
Podiceps cristatus	Great crested grebe	Birds	Birds
Prunella modularis	Dunnock	Birds	Birds
Pyrrhula pyrrhula	Bullfinch	Birds	Birds
Regulus regulus	Goldcrest	Birds	Birds
Riparia riparia	Sand martin	Birds	Birds
Sterna hirundo	Common tern	Birds	Birds
Streptopelia decaocto	Collared dove	Birds	Birds
Strix aluco	Tawny owl	Birds	Birds
Sturnus vulgaris	Starling	Birds	Birds
Sylvia atricapilla	Blackcap	Birds	Birds
Sylvia borin	Garden warbler	Birds	Birds
Sylvia communis	Whitethroat	Birds	Birds
Sylvia curruca	Lesser whitethroat	Birds	Birds
Tachybaptus ruficollis	Little grebe	Birds	Birds
Troglodytes troglodytes	Wren	Birds	Birds
Turdus merula	Blackbird	Birds	Birds
Turdus philomelos	Song thrush	Birds	Birds
Turdus viscivorus	Mistle thrush	Birds	Birds
Vanellus vanellus	Lapwing	Birds	Birds

Table 2 Vertebrates

Scientific Name	Common Name	Group	Group - detail
Bufo bufo	Common toad	Vertebrates	Amphibians
Lissotriton vulgaris	Smooth newt (adult)	Vertebrates	Amphibians
Rana temporaria	Frog (adult and tadpole)	Vertebrates	Amphibians
Triturus vulgaris	Smooth newt tadpole	Vertebrates	Amphibians
Myotis daubentonii	Daubentons	Vertebrates	Bat
Nyctalus noctula	Noctule	Vertebrates	Bat
Pipistrellus nathusii	Nathusius' pipistrelle	Vertebrates	Bat
Pipistrellus pipistrellus	Pipistrelle	Vertebrates	Bat
Pipistrellus pygmaeus	Soprano pipistrelle	Vertebrates	Bat
Cyprinus carpio	Carp	Vertebrates	Fish
Esox lucius	Pike	Vertebrates	Fish
Gasterosteus aculeatus	3-Spined Stickleback	Vertebrates	Fish
Leuciscus cephalus	Chub	Vertebrates	Fish
Perca fluviatiles	Perch	Vertebrates	Fish
Phoxinus phoxinus	Minnow	Vertebrates	Fish
Rutilius rutilius	Roach	Vertebrates	Fish
Apodemus sylvaticus	Woodmouse	Vertebrates	Mammals
Meles meles	Badger	Vertebrates	Mammals
Mustela lutreola	Mink	Vertebrates	Mammals
Oryctolagus cuniculus	Rabbit	Vertebrates	Mammals
Rattus norvegicus	Brown rat	Vertebrates	Mammals
Sciurus carolinensis	Grey squirrel	Vertebrates	Mammals
Sorex araneus	Common shrew	Vertebrates	Mammals
Talpa europaea	Mole	Vertebrates	Mammals
Vulpes vulpes	Fox	Vertebrates	Mammals
Natrix natrix	Grass Snake	Vertebrates	Reptiles

Table 3a Higher Plants – Meadow/wayside

Scientific Name	Common Name	Group	Group - detail
Achillea millefolium	Yarrow	Plants	Meadow/wayside
Agrostis stolonifera	Creeping Bent	Plants	Meadow/wayside
Alopecurus myosuroides	Black-grass	Plants	Meadow/wayside
Alopecurus pratensis	Meadow Foxtail	Plants	Meadow/wayside
Anthoxanthum odoratum	Sweet Vernal-grass	Plants	Meadow/wayside
Arctium lappa	Greater burdock	Plants	Meadow/wayside
Arctium minus	Lesser Burdock	Plants	Meadow/wayside
Armoracia rusticana	Horse radish	Plants	Meadow/wayside
Arrhenatherum elatius	False Oat-grass	Plants	Meadow/wayside
Artemisia vulgaris	Mugwort	Plants	Meadow/wayside
Bellis perennis	Daisy	Plants	Meadow/wayside
Bromus hordeaceus	Soft brome	Plants	Meadow/wayside
Bromus sterilis	Barren Brome	Plants	Meadow/wayside
Buddleja davidii	Buddleja	Plants	Meadow/wayside
Calystegia sepium	Hedge Bindweed	Plants	Meadow/wayside
Calystegia silvatica	Large bindweed	Plants	Meadow/wayside
Capsella bursa-pastoris	Shepherd Purse	Plants	Meadow/wayside
Cardamine hirstuta	Hairy bittercress	Plants	Meadow/wayside
Carduus crispus ssp. multiflorus	Welted Thistle	Plants	Meadow/wayside
Carex muricata	Prickly Sedge	Plants	Meadow/wayside
Catapodium rigidum	Fern-grass	Plants	Meadow/wayside
Centaurea nigra	Common Knapweed	Plants	Meadow/wayside
Centaurium erythraea	Common centaury	Plants	Meadow/wayside
Cerastium fontanum ssp. vulgare	Common Mouse-ear	Plants	Meadow/wayside
Cerastium glomeratum	Sticky Mouse-ear	Plants	Meadow/wayside
Chamerion angustifolium	Rosebay willowherb	Plants	Meadow/wayside
Cirsium arvense	Creeping Thistle	Plants	Meadow/wayside
Cirsium vulgare	Spear Thistle	Plants	Meadow/wayside
Crepis sp	Hawkbeard	Plants	Meadow/wayside
Crepis vesicaria	Beaked Hawk's-beard	Plants	Meadow/wayside
Cynosurus cristatus	Crested Dog's-tail	Plants	Meadow/wayside
Dactylis glomerata	Cocksfoot grass	Plants	Meadow/wayside
Daucus carota ssp carota	Wild carrot	Plants	Meadow/wayside
Deschampsia cespitosa	Tufted Hair-grass	Plants	Meadow/wayside
Dipsacus fullonum	Teasel	Plants	Meadow/wayside
Echium vulgare	Viper's bugloss	Plants	Meadow/wayside
Epilobium montanum	Broadleaved willowherb	Plants	Meadow/wayside
Equisetum arvense	Field Horsetail	Plants	Meadow/wayside
Fallopia japonica	Japanese knotweed	Plants	Meadow/wayside
Festuca pratensis	Meadow Fescue	Plants	Meadow/wayside
Festuca rubra agg	Red fescue	Plants	Meadow/wayside
Galega officinalis	Goat's-rue	Plants	Meadow/wayside
Galium aparine	Cleavers	Plants	Meadow/wayside
Galium verum	Lady's bedstraw	Plants	Meadow/wayside
Geranium dissectum	Cut-leaved Crane's-bill	Plants	Meadow/wayside
Geranium molle	Dove's-foot Crane's-bill	Plants	Meadow/wayside
Geranium pratense	Meadow Crane's-bill	Plants	Meadow/wayside
Geranium pyrenaicum	Hedgerow Crane's-bill	Plants	Meadow/wayside

Scientific Name	Common Name	Group	Group - detail
Geranium robertianum	Herb-Robert	Plants	Meadow/wayside
Geum urbanum	Wood Avens	Plants	Meadow/wayside
Heracleum sphondylium agg	Hogweed	Plants	Meadow/wayside
Holcus lanatus	Yorkshire-fog	Plants	Meadow/wayside
Hordeum murinum	Wall Barley	Plants	Meadow/wayside
Hypericum perforatum	Common St Johns wort	Plants	Meadow/wayside
Hypochaeris radicata	Catsear	Plants	Meadow/wayside
Lamium album	White dead nettle	Plants	Meadow/wayside
Lamium purpureum	Red Dead-nettle	Plants	Meadow/wayside
Lapsana communis	Nipplewort	Plants	Meadow/wayside
Lathyrus latifolius	Broad-leaved Everlasting-pea	Plants	Meadow/wayside
Lathyrus pratensis	Meadow vetchling	Plants	Meadow/wayside
Lepidium draba	Hoary cress	Plants	Meadow/wayside
Leucanthemum vulgare	Ox eye daisy	Plants	Meadow/wayside
Lolium perenne	Perennial Rye-grass	Plants	Meadow/wayside
Lotus corniculatus	Bird's foot trefoil	Plants	Meadow/wayside
Matricaria discoidea	Pineappleweed	Plants	Meadow/wayside
Medicago lupulina	Black medick	Plants	Meadow/wayside
Mellilotus officinalis	Melliot	Plants	Meadow/wayside
Myosotis arvensis	Field Forget-me-not	Plants	Meadow/wayside
Oenothera agg	Evening primrose	Plants	Meadow/wayside
Papaver somniferum	Opium Poppy	Plants	Meadow/wayside
Persicaria bistorta	Amphibious Bistort	Plants	Meadow/wayside
Persicaria maculosa	Common bistort	Plants	Meadow/wayside
Picris echioides	Bristly Oxtongue	Plants	Meadow/wayside
Plantago lanceolata	Ribwort Plantain	Plants	Meadow/wayside
Plantago major	Greater Plantain	Plants	Meadow/wayside
Poa annua	Annual Meadow-grass	Plants	Meadow/wayside
Poa pratensis	Smooth meadow grass	Plants	Meadow/wayside
Poa trivialis	Rough Meadow-grass	Plants	Meadow/wayside
Polygonum aviculare agg.	Knotgrass	Plants	Meadow/wayside
Potentilla anserina	Silverweed	Plants	Meadow/wayside
Potentilla reptans	Creeping Cinquefoil	Plants	Meadow/wayside
Primula veris	Cowslip	Plants	Meadow/wayside
Prunella vulgaris	Selfheal	Plants	Meadow/wayside
Ranunculus acris	Meadow buttercup	Plants	Meadow/wayside
Ranunculus bulbosus	Bulbous buttercup	Plants	Meadow/wayside
Ranunculus repens	Creeping Buttercup	Plants	Meadow/wayside
Reseda luteola	Weld	Plants	Meadow/wayside
Rhinanthus minor	Yellow rattle	Plants	Meadow/wayside
Rumex acetosa	Common Sorrel	Plants	Meadow/wayside
Rumex crispus agg	Curled dock	Plants	Meadow/wayside
Rumex obtusifolius	Broad leaved dock	Plants	Meadow/wayside
Sanguisorba minor	Salad burnet	Plants	Meadow/wayside
Sanguisorba officinalis	Great Burnet	Plants	Meadow/wayside
Senecio jacobaea	Common Ragwort	Plants	Meadow/wayside
Silaum silaus	Pepper saxifrage	Plants	Meadow/wayside
Silene latifolia	White Campion	Plants	Meadow/wayside
Silene latifolia x dioica	Hybrid campion	Plants	Meadow/wayside
Sinapis arvensis	Charlock	Plants	Meadow/wayside
Sonchus asper	Prickly Sow-thistle	Plants	Meadow/wayside
Symphytum x uplandicum	Russian Comfrey	Plants	Meadow/wayside
Taraxacum agg	Dandelion sp	Plants	Meadow/wayside

Scientific Name	Common Name	Group	Group - detail
Taraxacum sect. Vulgaria	Common Dandelion	Plants	Meadow/wayside
Thalictrum flavum	Common Meadow-rue	Plants	Meadow/wayside
Tragopogon pratensis	Goat's-beard	Plants	Meadow/wayside
Trifolium dubium	Lesser Trefoil	Plants	Meadow/wayside
Trifolium pratense	Red clover	Plants	Meadow/wayside
Trifolium repens	White clover	Plants	Meadow/wayside
Tripleurospermum inodorum	Scentless mayweed	Plants	Meadow/wayside
Tussilago farfara	Coltsfoot	Plants	Meadow/wayside
Urtica dioica	Stinging nettle	Plants	Meadow/wayside
Verbascum thapsus	Great mullein	Plants	Meadow/wayside
Veronica arvensis	Wall Speedwell	Plants	Meadow/wayside
Veronica hederifolia	Ivy-leaved Speedwell	Plants	Meadow/wayside
Veronica serpyllifolia agg	Thyme leaved speedwell	Plants	Meadow/wayside
Vicia cracca	Tufted Vetch	Plants	Meadow/wayside
Vicia sativa ssp segetalis	Common vetch	Plants	Meadow/wayside

Table 3b Higher Plants - Wetland

Scientific Name	Common Name	Group	Group - detail
Acorus calamus	Sweet-flag	Plants	Water/wetland
Alisma sp	Water plantain	Plants	Water/wetland
Alopecurus geniculatus	Marsh Foxtail	Plants	Water/wetland
Angelica archangelica	Garden Angelica	Plants	Water/wetland
Barbarea vulgaris	Winter-cress	Plants	Water/wetland
Callitriche	Star-wort	Plants	Water/wetland
Caltha palustris	Marsh marigold	Plants	Water/wetland
Cardamine flexuosa	Wavy Bitter-cress	Plants	Water/wetland
Cardamine pratensis	Cuckooflower	Plants	Water/wetland
Carex acutiformis	Lesser Pond-sedge	Plants	Water/wetland
Carex hirta	Hairy Sedge	Plants	Water/wetland
Carex otrubae	False fox sedge	Plants	Water/wetland
Carex riparia	Greater Pond-sedge	Plants	Water/wetland
Conium maculatum	Hemlock	Plants	Water/wetland
Eleocharis palustris	Common Spike-rush	Plants	Water/wetland
Elodea sp	Pondweed	Plants	Water/wetland
Epilobium hirsutum	Great hairy willowherb	Plants	Water/wetland
Equisetum fluviatile	Water Horsetail	Plants	Water/wetland
Equisetum palustre	Marsh Horsetail	Plants	Water/wetland
Filipendula ulmaria	Meadow sweet	Plants	Water/wetland
Geum rivale	Water avens	Plants	Water/wetland
Glyceria maxima	Reed Sweet-grass	Plants	Water/wetland
Hydrocotyle ranunculoides	Floating Pennywort	Plants	Water/wetland
Hypericum tetrapterum	Square-stalked St Johns wort	Plants	Water/wetland
Impatiens glandulifera	Indian Balsam	Plants	Water/wetland
Iris pseudoacorus	Yellow flag iris	Plants	Water/wetland
Juncus conglomeratus	Compact rush	Plants	Water/wetland
Juncus effusus	Soft-rush	Plants	Water/wetland
Juncus inflexus	Hard Rush	Plants	Water/wetland
Lemna minor	Duckweed	Plants	Water/wetland
Lychnis flos-cuculi	Ragged robin	Plants	Water/wetland
Lycopus europaeus	Gypsywort	Plants	Water/wetland
Lythrum salicaria	Purple loosestrife	Plants	Water/wetland
Mentha aquatica	Watermint	Plants	Water/wetland

Scientific Name	Common Name	Group	Group - detail
Myosotis laxa ssp. caespitosa	Tufted Forget-me-not	Plants	Water/wetland
Myosotis scorpioides	Water forget-me-not	Plants	Water/wetland
Nuphar lutea	Yellow water lily	Plants	Water/wetland
Persicaria amphibia	The Rivulet	Plants	Water/wetland
Phalaris arundinacea	Reed Canary-grass	Plants	Water/wetland
Phragmites australis	Common reed	Plants	Water/wetland
Pulicaria dysenterica	Common fleabane	Plants	Water/wetland
Ranunculus scleratus	Celery-leaved crowfoot	Plants	Water/wetland
Rorippa amphibia	Great Yellow-cress	Plants	Water/wetland
Rumex hydrolapathum	Water Dock	Plants	Water/wetland
Schoenoplectus lacustris	Common Club-rush	Plants	Water/wetland
Scrophularia auriculata	Water figwort	Plants	Water/wetland
Sparganium emersum	Unbranched Bur-reed	Plants	Water/wetland
Sparganium erectum agg	Branched bur-reed	Plants	Water/wetland
Stachys palustris	Marsh Woundwort	Plants	Water/wetland
Typha latifolia	Reedmace	Plants	Water/wetland
Veronica beccabunga	Brooklime	Plants	Water/wetland

Table 3c Higher Plants – Woodland

Scientific Name	Common Name	Group	Group - detail
Ajuga reptans	Bugle	Plants	Woodland
Alliaria petiolata	Garlic mustard	Plants	Woodland
Angelica sylvestris	Wild Angelica	Plants	Woodland
Anthriscus sylvatica	Cow parsley	Plants	Woodland
Carex pendula	Pendulous Sedge	Plants	Woodland
Cornus sanguinea	Dogwood	Plants	Woodland
Cotoneaster	Cotoneaster	Plants	Woodland
Euonymous europeaus	Spindle	Plants	Woodland
Glechoma hederacea	Ground-ivy	Plants	Woodland
Hedera helix	Ivy	Plants	Woodland
Humulus lupulus	Common Hop	Plants	Woodland
Hyacinthoides hispanica	Spanish Bluebell	Plants	Woodland
Hyacinthoides non-scripta	Bluebell	Plants	Woodland
Ligustrum vulgare	Wild Privet	Plants	Woodland
Lonicera periclymenum	Honeysuckle	Plants	Woodland
Pentaglottis sempervirens	Green alkanet	Plants	Woodland
Ranunculus ficaria	Lesser Celandine	Plants	Woodland
Rhamnus cathartica	Buckthorn	Plants	Woodland
Rosa canina	Dog-rose	Plants	Woodland
Rubus fruticosus agg	Bramble	Plants	Woodland
Rubus idaeus	Raspberry	Plants	Woodland
Rumex sanguineus	Wood Dock	Plants	Woodland
Sambucus nigra	Elder	Plants	Woodland
Silene dioica	Red campion	Plants	Woodland
Sisymbrium officinale	Hedge Mustard	Plants	Woodland
Solanum dulcamara	Bittersweet	Plants	Woodland
Stachys sylvatica	Hedge Woundwort	Plants	Woodland
Veronica chamaedrys	Germander speedwell	Plants	Woodland
Viburnum lantana	Wayfaring tree	Plants	Woodland
Viburnum opulus	Guelder rose	Plants	Woodland
Viola sp	Violet sp	Plants	Woodland

Table 3d Higher Plants - Trees

Scientific Name	Common Name	Group	Group - detail
Acer campestre	Field maple	Plants	Tree
Acer platanoides	Norway maple	Plants	Tree
Acer pseudoplatanus	Sycamore	Plants	Tree
Aesculus hippocastanum	Horse chestnut	Plants	Tree
Alnus glutinosa	Alder	Plants	Tree
Betula pendula	Silver birch	Plants	Tree
Betula pubescens	Downy Birch	Plants	Tree
Corylus avellana	Hazel	Plants	Tree
Crataegus monogyna	Hawthorn	Plants	Tree
Fagus sylvatica	Beech	Plants	Tree
Fraxinus excelsior	Ash	Plants	Tree
Ilex aquifolium	Holly	Plants	Tree
Larix decidua	Larch	Plants	Tree
Malus domestica	Apple (domestic)	Plants	Tree
Malus sylvestris	Crab apple	Plants	Tree
Pinus sylvestris	Scots pine	Plants	Tree
Populus nigra	Lombardy poplar	Plants	Tree
Populus nigra 'Italica'	Aspen	Plants	Tree
Populus tremula	Hybrid Black-poplar	Plants	Tree
Populus x canadensis		Plants	Tree
Prunus avium	Wild Cherry	Plants	Tree
Prunus padus	Bird cherry	Plants	Tree
Prunus spinosa	Blackthorn	Plants	Tree
Quercus petraea	Sesile oak	Plants	Tree
Quercus robur	Pedunculate Oak	Plants	Tree
Salix alba	White willow	Plants	Tree
Salix caprea	Goat willow	Plants	Tree
Salix cinerea ssp oleifolia	Rusty willow	Plants	Tree
Salix cinerea ssp. cinerea	Grey Willow	Plants	Tree
Salix fragilis	Crack-willow	Plants	Tree
Salix viminalis	Osier	Plants	Tree
Sorbus aucuparia	Rowan	Plants	Tree
Tilia cordata	Small leaved lime	Plants	Tree
Tilia x europaea	European lime	Plants	Tree
Ulmus sp	Elm	Plants	Tree

Table 4 Lower Plants

Scientific Name	Common Name	Group	Group - detail
Klebsormidium crustulata		Lower plants	Algae
Trentapolia sp.		Lower plants	Algae
Dryopteris filix-mas	Male-fern	Lower plants	Fern
Polystichum setiferum	Soft Shield-fern	Lower plant	Fern
Agrocybe praecox		Lower plants	Fungi
Calloria neglecta		Lower plants	Fungi
Dendryphiella vinosa		Lower plants	Fungi
Diatrype bullata		Lower plants	Fungi
Diatrype stigma		Lower plants	Fungi
Erysiphe cichoracearum		Lower plants	Fungi
Hypochnicum vellereum		Lower plants	Fungi
Leptosphaeria acuta		Lower plants	Fungi
Phragmidium mucronatum		Lower plants	Fungi
Podosphaera leucotricha		Lower plants	Fungi
Puccinia acetosae		Lower plants	Fungi
Puccinia caricina		Lower plants	Fungi
Puccinia coronata		Lower plants	Fungi
Puccinia phragmitis		Lower plants	Fungi
Rosellinia aquila		Lower plants	Fungi
Stereum hirsutum (old)		Lower plants	Fungi
Taphrina pruni		Lower plants	Fungi
Trioza remota		Lower plants	Fungi
Triphragmium ulmariae		Lower plants	Fungi
Amandinea punctata		Lower plants	Lichens
Aspicilia contorta hoffmanniana		Lower plants	Lichens
Caloplaca citrina		Lower plants	Lichens
Caloplaca crenulatella		Lower plants	Lichens
Caloplaca holocarpa		Lower plants	Lichens
Caloplaca oasis		Lower plants	Lichens
Candelariella aurella		Lower plants	Lichens
Candelariella reflexa		Lower plants	Lichens
Candelariella vitellina		Lower plants	Lichens
Catillaria lenticularis		Lower plants	Lichens
Clauzadea monticola		Lower plants	Lichens
Evernia prunastri		Lower plants	Lichens
Fuscidea lightfootii		Lower plants	Lichens
Hypogymnia physodes		Lower plants	Lichens
Hypogymnia tubulosa		Lower plants	Lichens
Lecania cyrtella		Lower plants	Lichens
Lecanora albescens		Lower plants	Lichens
Lecanora campestris		Lower plants	Lichens
Lecanora carpinea		Lower plants	Lichens
Lecanora chlarotera		Lower plants	Lichens
Lecanora dispersa		Lower plants	Lichens
Lecanora hagenii		Lower plants	Lichens
Lecanora muralis		Lower plants	Lichens
Lecidella elaeochroma		Lower plants	Lichens
Lecidella stigmatea		Lower plants	Lichens
Lepraria incana		Lower plants	Lichens

Scientific Name	Common Name	Group	Group - detail
Lepraria lobificans		Lower plants	Lichens
Melanelixia subaurifera		Lower plants	Lichens
Parmelia sulcata		Lower plants	Lichens
Phaeophyscia orbicularis		Lower plants	Lichens
Physcia adscendens		Lower plants	Lichens
Physcia caesia		Lower plants	Lichens
Physcia tenella		Lower plants	Lichens
Ramalina farinacea		Lower plants	Lichens
Ramalina fastigiata		Lower plants	Lichens
Rinodina gennarii		Lower plants	Lichens
Sarcogyne regularis		Lower plants	Lichens
Scoliciosporum umbrinum		Lower plants	Lichens
Verrucaria nigrescens		Lower plants	Lichens
Verrucaria viridula		Lower plants	Lichens
Xanthoria elegans		Lower plants	Lichens
Xanthoria parietina		Lower plants	Lichens
Xanthoria polycarpa		Lower plants	Lichens
Xanthoria ucrainica		Lower plants	Lichens
Brachythecium rutabulum		Lower plants	Moss
Bryum argenteum		Lower plants	Moss
Bryum capillare		Lower plants	Moss
Calliergonella cuspidata		Lower plants	Moss
Campylium chrysophyllum		Lower plants	Moss
Ceratodon purpureus		Lower plants	Moss
Dicranella varia		Lower plants	Moss
Eurhynchium praelongum		Lower plants	Moss
Funaria hygrometrica		Lower plants	Moss
Grimmia pulvinata		Lower plants	Moss
Hypnum cupressiforme		Lower plants	Moss
Orthotrichum anomalum		Lower plants	Moss
Rhytidiadelphus squarrosus		Lower plants	Moss
Tortula muralis var. muralis		Lower plants	Moss

Table 5 Invertebrates

Scientific Name	Common Name	Group	Group - detail
Acalitus brevitarsus		Invertebrates	Acarina
Acari sp	Water mite	Invertebrates	Acarina
Aceria aceriscampestris		Invertebrates	Acarina
Aceria eriobus		Invertebrates	Acarina
Aceria fraxiniuonus		Invertebrates	Acarina
Aceria macrochelus		Invertebrates	Acarina
Aceria macrosrhyncus		Invertebrates	Acarina
Aceria pseudoplatini		Invertebrates	Acarina
Cecidophyes galii	Gall Mite	Invertebrates	Acarina
Phyllocoptes goniothorax	Gall Mite	Invertebrates	Acarina
Phytoptus avellana		Invertebrates	Acarina
Crangonyx pseudogracilus	Water shrimp	Invertebrates	Amphipoda
Tetragnatha		Invertebrates	Araneae
Sphaerium corneum	Freshwater pea mussel	Invertebrates	Bivalvia
Daphnia sp	Water flea	Invertebrates	Branchiopoda
Lithobius forficatus	Centipede	Invertebrates	Chilopoda
Adalia 10-punctata	10 spot ladybird	Invertebrates	Coleoptera
Adalia 2-punctata	2-spot Ladybird	Invertebrates	Coleoptera
Cantharis livida	Soldier Beetle	Invertebrates	Coleoptera
Cantharis nigricans	Soldier Beetle	Invertebrates	Coleoptera
Cantharis rufa	Soldier Beetle	Invertebrates	Coleoptera
Coccinella 7-punctata	7-spot Ladybird	Invertebrates	Coleoptera
Dytiscus marginalis	Greater diving beetle	Invertebrates	Coleoptera
Gastrophysa viridula	Beetle	Invertebrates	Coleoptera
Harmonia axyridis	Harlequin Ladybird	Invertebrates	Coleoptera
Malachius bipustulatus	Beetle	Invertebrates	Coleoptera
Ocypus olens	Devils coachman	Invertebrates	Coleoptera
Phyllobius pomaceus	Hart's-tongue	Invertebrates	Coleoptera
Phyllitis scolopendrium	Nettle weevil	Lower plant	Coleoptera
Podabrus alpinus	Soldier Beetle	Invertebrates	Coleoptera
Pterostichus nigrita	Ground beetle	Invertebrates	Coleoptera
Pterostichus prodidus	Ground beetle	Invertebrates	Coleoptera
Pyrochroa serraticornis	Cardinal Beetle	Invertebrates	Coleoptera
Rhagonycha limbata	Beetle	Invertebrates	Coleoptera
Cyclops sp	Cyclops	Invertebrates	Cyclopoida
Forficula auricularia	Common Earwig	Invertebrates	Dermaptera
Tachypodoiulus niger	Millipede	Invertebrates	Diplopoda
Anopheles sp	Mosquito larvae	Invertebrates	Diptera
Bibio marci	St. Marks Fly	Invertebrates	Diptera
Chironomus sp	Bloodworm	Invertebrates	Diptera
Dasineura auritae		Invertebrates	Diptera
Dasineura fraxini		Invertebrates	Diptera
Dasineura kieffferiana		Invertebrates	Diptera
Dasineura marginemtorquens		Invertebrates	Diptera
Dasineura plicatrix		Invertebrates	Diptera
Dasineura pustalans		Invertebrates	Diptera
Dasineura rosae		Invertebrates	Diptera
Dasineura ulmariai		Invertebrates	Diptera
Dasineura urticae		Invertebrates	Diptera
Empis livida	Dance Fly	Invertebrates	Diptera
Empis tesselata	Dance fly	Invertebrates	Diptera

Scientific Name	Common Name	Group	Group - detail
Episyrphus balteatus	Hover-fly	Invertebrates	Diptera
Eriophyes galli		Invertebrates	Diptera
Eriophyes inangulis		Invertebrates	Diptera
Eriophyes laevis		Invertebrates	Diptera
Eriophyes sorbi		Invertebrates	Diptera
Eristalis (Eoseristalis) pertinax	Hover-fly	Invertebrates	Diptera
Eupeodes (Eupeodes) latifasciatus	Hover-fly	Invertebrates	Diptera
Helophilus pendulus	Hover-fly	Invertebrates	Diptera
Helophilus trivittatus	Hover-fly	Invertebrates	Diptera
Iteomyia cuprae		Invertebrates	Diptera
Iteomyia major		Invertebrates	Diptera
Lasioptera rubri		Invertebrates	Diptera
Leucozona lucorum	Banded hoverfly	Invertebrates	Diptera
Melangyna labiatarum/compositarum	Hover-fly	Invertebrates	Diptera
Mesembrina meridiana	House-fly	Invertebrates	Diptera
Myathropa florea	Hover-fly	Invertebrates	Diptera
Parhelophilus	Hoverfly	Invertebrates	Diptera
Platycheirus (Platycheirus) scutatus s.l.	Hover-fly	Invertebrates	Diptera
Rhagio scolopaceus	Downlooker Snipefly	Invertebrates	Diptera
Rhingia campestris	Hover-fly	Invertebrates	Diptera
Semudobia betulae		Invertebrates	Diptera
Semudobia farrida		Invertebrates	Diptera
Semudobia skuhravae		Invertebrates	Diptera
Sphaerophoria	Hover-fly	Invertebrates	Diptera
Tipula olearacea	Cranefly	Invertebrates	Diptera
Urophora cardui		Invertebrates	Diptera
Volucella bombylans	Hover-fly	Invertebrates	Diptera
Volucella bombylans f. plumata	Hover-fly	Invertebrates	Diptera
Ephemera sp	Mayfly larvae	Invertebrates	Ephemeroptera
Bithynia sp	Water snail	Invertebrates	Gastropoda
Cepaea nemoralis	Snail	Invertebrates	Gastropoda
Lymnaea stagnalis	Pond snail	Invertebrates	Gastropoda
Planorbis sp	Ramshorn snail	Invertebrates	Gastropoda
Aporrectodea caliginosa	Grey worm	Invertebrates	Haplotaxida
Aporrectodea longa	Blackheaded worm	Invertebrates	Haplotaxida
Aporrectodea rosea	Rosy-tipped worm	Invertebrates	Haplotaxida
Lumbricus rubellus	Redhead worm	Invertebrates	Haplotaxida
Lumbricus terrestris	Lob worm	Invertebrates	Haplotaxida
Octolasian cyaneum	Blue-grey worm	Invertebrates	Haplotaxida
Corixa sp	Water boatman	Invertebrates	Hemiptera
Enophyes prunispinosa		Invertebrates	Hemiptera
Gerris lacustris	Pond skater	Invertebrates	Hemiptera
Nepa cinerea	Water scorpion	Invertebrates	Hemiptera
Notonecta glauca	Greater waterboatman	Invertebrates	Hemiptera
Pemphigus bursarius		Invertebrates	Hemiptera
Psyllopsis fraxini		Invertebrates	Hemiptera
Xestophanes potentillae		Invertebrates	Hemiptera
Miris striata	Streaked bugkin	Invertebrates	Heteroptera
Andrena carantonica	Solitary bee	Invertebrates	Hymenoptera

Scientific Name	Common Name	Group	Group - detail
Andrena chrysosceles	Bee	Invertebrates	Hymenoptera
Andricus lignicola		Invertebrates	Hymenoptera
Apis mellifera	Honey Bee	Invertebrates	Hymenoptera
Blennocampa phyllocolpa		Invertebrates	Hymenoptera
Bombus lapidarius	Red-tailed bumblebee	Invertebrates	Hymenoptera
Bombus pascuorum	Bumblebee	Invertebrates	Hymenoptera
Bombus pratorum	Bumblebee	Invertebrates	Hymenoptera
Bombus terrestris/lucorum agg.	Bumblebee	Invertebrates	Hymenoptera
Diplolepis rosae		Invertebrates	Hymenoptera
Lasius niger s. l.		Invertebrates	Hymenoptera
Neuroterus numismales		Invertebrates	Hymenoptera
Neuroterus quercusbaccarum		Invertebrates	Hymenoptera
Pontania	Gall Wasp	Invertebrates	Hymenoptera
Pontania gllarium		Invertebrates	Hymenoptera
Pontania proxima	Willow gall	Invertebrates	Hymenoptera
Pontania proxima	Black poplar	Invertebrates	Hymenoptera
Armadillidium vulgare	Pill woodlouse	Invertebrates	Isopoda
Asellus aquaticus	Hog louse	Invertebrates	Isopoda
Abrostola tripartita	The Spectacle	Invertebrates	Lepidoptera
Acronicta leporina	The Miller	Invertebrates	Lepidoptera
Agapeta hamana		Invertebrates	Lepidoptera
Agrochola circellaris	Brick moth	Invertebrates	Lepidoptera
Agrotis exclamationis	Heart and dart	Invertebrates	Lepidoptera
Agrotis puta	Shuttle-shaped dart	Invertebrates	Lepidoptera
Anthocharis cardamines	Orange tip	Invertebrates	Lepidoptera
Apamea sordens	Rustic Shoulder-knot	Invertebrates	Lepidoptera
Apamea unanimis	Small Clouded Brindle	Invertebrates	Lepidoptera
Aphelia paleana	Timothy tortrix	Invertebrates	Lepidoptera
Autographa gamma	Silver Y	Invertebrates	Lepidoptera
Axylia putris	Flame	Invertebrates	Lepidoptera
Biston betularia	Peppered Moth	Invertebrates	Lepidoptera
Bucculatrix nigricomella		Invertebrates	Lepidoptera
Cabera exanthemata	Common Wave	Invertebrates	Lepidoptera
Cabera pusaria	Common White Wave	Invertebrates	Lepidoptera
Calliteara pudibunda	Pale tussock	Invertebrates	Lepidoptera
Caloptilia stigmatella		Invertebrates	Lepidoptera
Celypha lacunana		Invertebrates	Lepidoptera
Chiasmia clathrata	Latticed heath	Invertebrates	Lepidoptera
Chilo phragmitella		Invertebrates	Lepidoptera
Chloroclysta truncata	Common marbled carpet	Invertebrates	Lepidoptera
Clepsis spectrana	Cyclamen Tortrix	Invertebrates	Lepidoptera
Cochylimorpha straminea		Invertebrates	Lepidoptera
Coleophora gryphipennella		Invertebrates	Lepidoptera
Coleophora serratella		Invertebrates	Lepidoptera
Colostygia pectinataria	Green Carpet	Invertebrates	Lepidoptera
Crambus lathoniellus		Invertebrates	Lepidoptera
Deilephila elpenor	Elephant Hawk-moth	Invertebrates	Lepidoptera
Diarsia rubi	Small Square-spot	Invertebrates	Lepidoptera
Ecliptoptera silaceata	Small phoenix	Invertebrates	Lepidoptera
Endothenia gentianaeana		Invertebrates	Lepidoptera
Epiblema cynosbatella		Invertebrates	Lepidoptera

Scientific Name	Common Name	Group	Group - detail
Epinotia immundana		Invertebrates	Lepidoptera
Epiphyas postvittana	Light Brown Apple Moth	Invertebrates	Lepidoptera
Epirrhoe alternata	Common carpet	Invertebrates	Lepidoptera
Eupithecia exiguata	Mottled pug	Invertebrates	Lepidoptera
Eupithecia venosata	Netted pug	Invertebrates	Lepidoptera
Eupithecia vulgata	Common pug	Invertebrates	Lepidoptera
Furcula furcula	Sallow Kitten	Invertebrates	Lepidoptera
Hada plebeja	Shears	Invertebrates	Lepidoptera
Hepialus humuli	Ghost moth	Invertebrates	Lepidoptera
Hepialus lupulinus	Common Swift	Invertebrates	Lepidoptera
Herminia grisealis	Small Fan-foot	Invertebrates	Lepidoptera
Hoplodrina ambigua	Vine's Rustic	Invertebrates	Lepidoptera
Hydriomena impluviata	May Highflyer	Invertebrates	Lepidoptera
Lacanobia oleracea	Bright-line Brown-eye	Invertebrates	Lepidoptera
Laothoe populi	Poplar hawk-moth	Invertebrates	Lepidoptera
Lobophora halterata	The Seraphim	Invertebrates	Lepidoptera
Lomaspilis marginata	Clouded Border	Invertebrates	Lepidoptera
Lomographa bimaculata	White-pinion Spotted	Invertebrates	Lepidoptera
Lomographa temerata	Clouded Silver	Invertebrates	Lepidoptera
Mimas tiliae	Lime hawk-moth	Invertebrates	Lepidoptera
Notodonta dromedarius	Iron prominent	Invertebrates	Lepidoptera
Notodonta ziczac	Pebble Prominent	Invertebrates	Lepidoptera
Nymphalis urticae	Small tortoiseshell caterpillar	Invertebrates	Lepidoptera
Ochropleura plecta	Flame Shoulder	Invertebrates	Lepidoptera
Odontopera bidentata	Scalloped Hazel	Invertebrates	Lepidoptera
Oligia fasciuncula	Middle-barred Minor	Invertebrates	Lepidoptera
Oligia strigilis agg	Marbled minor agg.	Invertebrates	Lepidoptera
Opisthograptis luteolata	Brimstone Moth	Invertebrates	Lepidoptera
Orthosia cerasi	Common quaker	Invertebrates	Lepidoptera
Orthosia gothica	Hebrew Character	Invertebrates	Lepidoptera
Pammene aurana		Invertebrates	Lepidoptera
Pararge aegeria	Speckled wood	Invertebrates	Lepidoptera
Perizoma affinitata	Redshank	Invertebrates	Lepidoptera
Phlogophora meticulosa	Angle Shades	Invertebrates	Lepidoptera
Pieris napi	Green-veined White	Invertebrates	Lepidoptera
Pieris rapae	Small white	Invertebrates	Lepidoptera
Plusia festucae	Gold Spot	Invertebrates	Lepidoptera
Polyommatus icarus	Common Blue	Invertebrates	Lepidoptera
Protodeltote pygarga	Marbled White Spot	Invertebrates	Lepidoptera
Pterostoma palpina	Pale Prominent	Invertebrates	Lepidoptera
Rivula sericealis	Straw dot	Invertebrates	Lepidoptera
Scoparia ambigualis		Invertebrates	Lepidoptera
Spilosoma lubricipeda	White Ermine	Invertebrates	Lepidoptera
Spilosoma luteum	Buff ermine	Invertebrates	Lepidoptera
Timandra comae	Blood-vein	Invertebrates	Lepidoptera
Xanthorhoe designata	Flame Carpet	Invertebrates	Lepidoptera
Xanthorhoe ferrugata	Dark-barred Twin-spot Carpet	Invertebrates	Lepidoptera
Xanthorhoe fluctuata	Garden carpet	Invertebrates	Lepidoptera
Xanthorhoe montanata	Silver ground carpet	Invertebrates	Lepidoptera
Xanthorhoe quadrifasiata	Large twin-spot carpet	Invertebrates	Lepidoptera

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Xestia c-nigrum	Setaceous Hebrew Character	Invertebrates	Lepidoptera
Zanclognatha tarsipennalis	The Fan-foot	Invertebrates	Lepidoptera
Panorpa communis	Scorpion fly	Invertebrates	Mecoptera
Sialis	Alder-fly	Invertebrates	Megaloptera
Arianta arbustorum	Copse snail	Invertebrates	Mollusca
Cepaea hortnesis	White lipped snail	Invertebrates	Mollusca
Chrysopa perla	Green Lacewing	Invertebrates	Neuroptera
Hemerobius humulinus	Brown Lacewing	Invertebrates	Neuroptera
Aeshna sp	Dragonfly larvae	Invertebrates	Odonata
Calopteryx splendens	Banded Demoiselle	Invertebrates	Odonata
Coenagrion puella	Azure Damselfly	Invertebrates	Odonata
Coenagrionidae sp	Damselfly larvae	Invertebrates	Odonata
Enallagma cyathigerum	Common blue damselfly	Invertebrates	Odonata
Erythromma najas	Red-eyed Damselfly	Invertebrates	Odonata
Ischnura elegans	Blue-tailed Damselfly	Invertebrates	Odonata
Libellula depressa	Broad bodied chaser	Invertebrates	Odonata
Pyrrhosoma nymphula	Large red damselfly	Invertebrates	Odonata
Chorthippus albomarginatus	Lesser Marsh Grasshopper	Invertebrates	Orthoptera
Tetrix subulata	Slender Ground-hopper	Invertebrates	Orthoptera
Piscicola geometra	Leech	Invertebrates	Rhynchobdellida
Arion ater agg.	Slug	Invertebrates	Stylommatophora
Arion subfuscus	Dusky Slug	Invertebrates	Stylommatophora
Deroceras reticulatum	Netted Slug	Invertebrates	Stylommatophora
Helix aspersa	Garden Snail	Invertebrates	Stylommatophora
Succinia putris	Snail	Invertebrates	Stylommatophora
Glyphotaelius pellucidus	Case-bearing Caddis Fly	Invertebrates	Trichoptera
Limnephilus flavicornis	Case-bearing Caddis Fly	Invertebrates	Trichoptera
Mystacides longicornis	Case-bearing Caddis Fly	Invertebrates	Trichoptera
Mystacides nigra	Case-bearing Caddis Fly	Invertebrates	Trichoptera
Phryganea bipunctata	Case-bearing Caddis Fly	Invertebrates	Trichoptera
Phryganea grandis	Case-bearing Caddis Fly	Invertebrates	Trichoptera
Tinodes waeneri	Caseless Caddis Fly	Invertebrates	Trichoptera
Trichoptera	Caddisfly larvae	Invertebrates	Trichoptera
Polycelis nigra	Flatworm	Invertebrates	Tricladida