A bat assessment of the site at Marlifield House and Leabeg, Kiltipper rd, Tallaght, Dublin

For The Peter Mc Verry Trust

C/o Kieran Brady

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By Donna Mullen M.P.P.M and Brian Keeley Bsc Hons in Zool

Maio, Tierworker, Kells Co Meath

Date of survey 18/08/2021

www.wildlifesurveys.net

Summary

Four species of bat were seen feeding around the building. No bats were seen entering or leaving the buildings. No bats were found to be roosting within the buildings or trees on this occasion.

Bat species found feeding and commuting on the site

Common pipistrelle -Pipistrellus pipistrellus

Soprano pipistrelle – Pipistrellus pygmaeus

Leisler's bat – Nyctalus Leisleri

Myotis – Probably Daubenton's bat. It can be difficult to tell Myotis species apart from sound analysis. Sound files are included within this report.

Recommendations

(1) Two 1FF Schwegler bat boxes with built-in timber panel bat boxes must be put in place. These should be placed on the buildings or trees, at least 3m high, with a clear drop below (as bats need to drop to start their flight). These can be purchased from www.nhbs.com or Amazon.fr .They must be placed in a dark area.

(2) Myotis bats are particularly sensitive to light pollution. Dark skies areas (under .1 lux over 3 meters) must be created within the plan to allow for the feeding and commuting of bats. A lower colour temperature luminaire should be used to reduce the blue light component – see Guidance Notes for the Reduction of Obtrusive Light GN01 (Institute of Lighting Professionals, 2011). Caps, cowls, sensor timers and bollard lights can be used to reduce light pollution. Lighting design will be in accordance with

Bats and Lighting – Guidance Notes for Planners, Engineers, Architects, and Developers (Bat Conservation Ireland, 2010).

- Bats and Lighting in the UK – Bats and the Built Environment Series (Institute of Lighting Professionals, September 2018).
- Guidance Notes for the Reduction of Obtrusive Light GN01 (Institute of Lighting Professionals, 2011).

(3) Bats were feeding in the gardens throughout the night. To retain feeding for bats, some areas within the site must be managed for wildflowers, or if planting is to occur, species must be chosen from the All-Ireland Pollinator Plan. http://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-friendlyplanting-code-temporary-draft.pdf .The planting of native trees, hedging or the instillation of a small pond within the garden would also benefit the bat population. Tree planting can also be used to screen light pollution.

(4) No bats were found to be roosting within the trees. However, if any mature, ivy clad trees with cavities are felled, this must be preceeded by a bat survey.

Desktop Survey of the existing environment

Thanks to Bat Conservation Ireland for their data.

Soprano pipistrelle distribution in Dublin

Leisler's bat distribution in Dublin

Daubenton's bat distribution in Dublin

Whiskered bat distribution in Dublin

Natterers bat distribution in Dublin

Common pipistrelle distribution in Dublin

Brown long eared bat distribution in Dublin

Nathusius pipistrelle records for Dublin

Bat records within 10km of the site

See Appendix III

Thanks to Bat Conservation Ireland for the use of their data in this report.

Methodology for Bat Survey

Bat Survey – Equipment

Exide Lamp

Petzl Tikka Head torch

One mini time expansion detector and analysis software

Two EM3 time expansion detectors and one echometer touch, and kaleidoscope analysis software- three surveyors overnight

The SM2 Mini detector was left overnight on the windowsill of the Leagbeg. All other detectors were handheld.

Date 18 Aug 2021

Weather Conditions

12 with fog at dawn.

Habitat Classification

Habitat Classification (Fossitt 2000)

BL1 (Walls and stonework)

BL3 (Buildings)

GAI (Grassland)

WD5 (Scattered trees)

WL1 (Hedgerows)

Complexity of lands and ability to cover ground during surveys –All outdoor areas were accessible. All buildings and attics were accessible.

Sunset/sunrise – 20.46 6.12

Light pollution – Light levels are low throughout the site, with levels of 0 lux recorded at 21.36.

Light pollution in the adjacent area from a streetlamp.

Planning proposal – The proposal is to remove the house to the right-hand-side of the plan (Leabeg) and all ancillary accommodation and build 10no. single storey dwellings for social housing needs in the area. The main house (Left hand side existing) is a day hostel run by the Peter McVerry Trust and will remain largely unaltered in the proposal. The site has some well-developed shrubs and trees which we plan to retain in the development.See Appendix I.

Constraints – Survey constraints

(1) Mobility of bats – Bat species are mobile and can move from roost to roost, depending on roost availability, feeding availability and weather conditions. They may move to roosts which have not been identified in this report in order to hibernate or create mating or feeding perches. A bat survey is a snapshot of bat activity over the survey time.

(2) **Identification of bats-** It can be difficult to differentiate myotis species. For this reason, the sound files are included within the report. Brown long eared bats are very quiet, and their presence can be overlooked in bat surveys as they may not register on bat detectors.

Report

The survey commenced at 20.15. The attics at Marlifield house and Leabeg were checked for bat droppings, carcasses, staining etc. None were seen. All outbuildings were also checked for bats. No signs of bats were found.

Interior of attics

The trees were examined for bat roosting potential. Most trees have mild bat roosting potential, but two trees in the garden have mild to moderate roosting potential – a eucalyptus tree and an ivy clad sycamore.

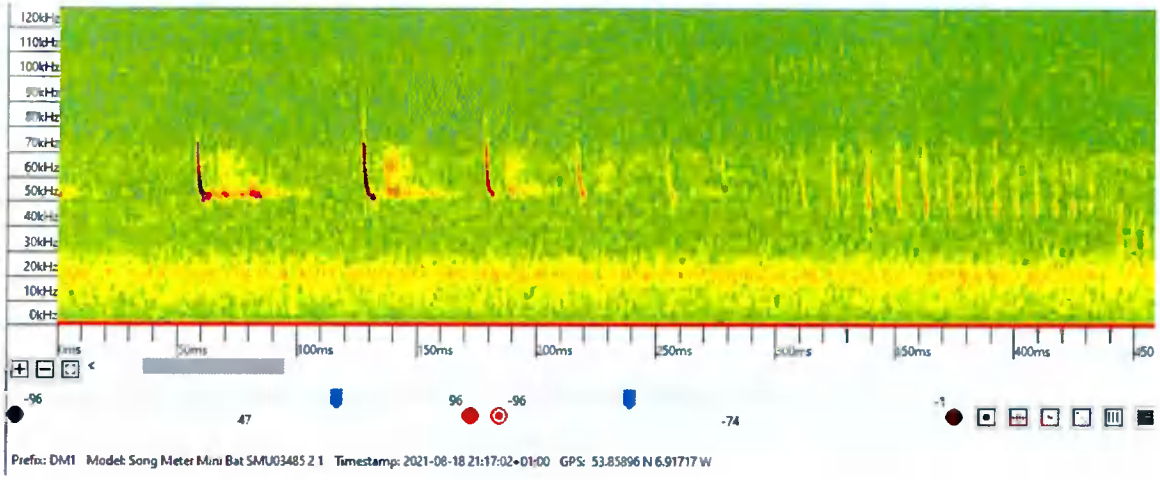
Trees with mild to moderate roosting potential.

The mini-Song meter was placed on the windowsill of Leabeg overnight.

Mini song meter placed overnight

At 21.08 two soprano pipistrelles came on the site from the north, and flew south, through the garden of Marlifield and into Leabeg, where they fed among the trees on

the eastern boundary. They were social calling by the ash and sweet chestnut tree and fed in this area for 10 minutes. They then moved to the front of Leabeg, where one continued to feed at intervals for half an hour.

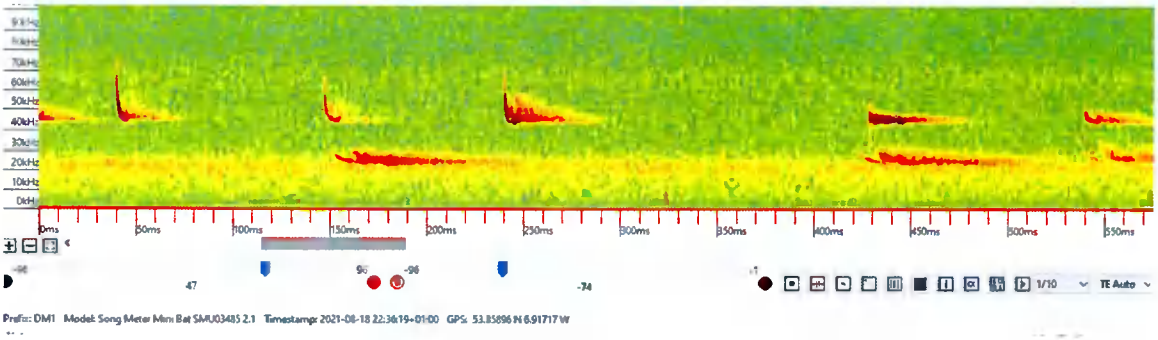


Soprano pipistrelle with feeding buzz at Leabeg

At 21.15 a Leisler's bat was recorded between Marlifield House and Leabeg, and at 21.17 a myotis, probably a Daubenton's bat was seen in the same area.

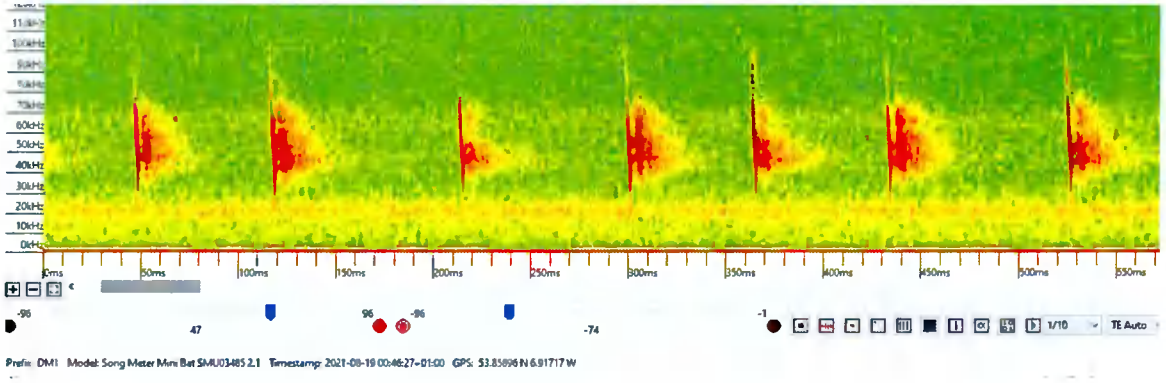
At 21.41 a Daubenton's bat was recorded in the north of the site, with a Leisler's bat. The Leisler's bat fed in this area until 22.17.

At 22.36 a common pipistrelle flew behind Leabeg.



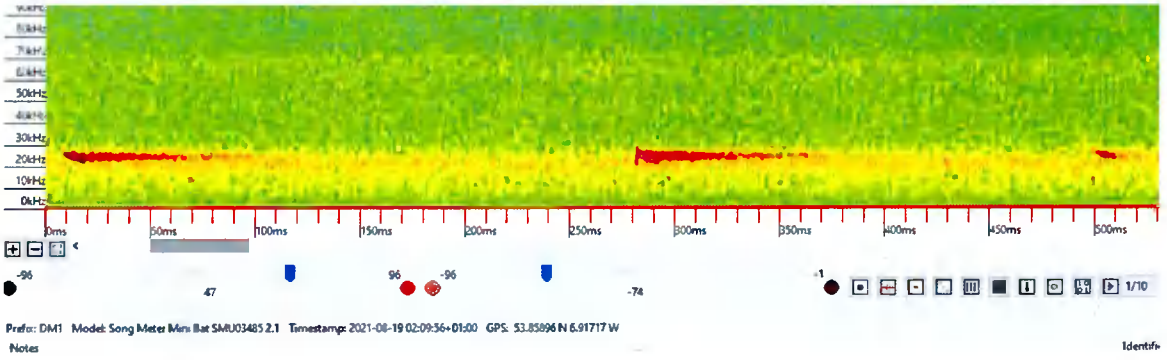
Common pipistrelle behind Leabeg

At 00.46 the Daubenton's bat travelled through the back garden of Leabeg.



Daubenton's bat 00.46

A Leisler's bat was recorded in the garden behind Leabeg at 4.11.



Leisler's bat 4.11

At 21.41 a Daubenton's bat was recorded in the north of the site, with a Leisler's bat. The Leisler's bat fed in this area until 22.17.it was seen flying in the front and back gardens at 4.57

At 4.59 a soprano pipistrelle was social calling at the front of Leabeg.It fed in the gardens until 5.41.

At 5.38 a common pipistrelle fed over the garden behind Leabeg. It stayed in this area, near the small shed for ten minutes before leaving the site.

Yellow triangle – Soprano pipistrelle

Yellow arrow – Soprano pipistrelle commuting route.

Red triangle – Leisler's bat

Red arrow – Leisler's commuting

Purple triangle – Daubenton's bat

Green triangle – common pipistrelle

Four species of bat were seen feeding around the building. No bats were seen entering or leaving the buildings. No bats were found to be roosting within the buildings or trees on this occasion. Myotis bats are very intolerant of light, so it is important that a dark sky zone is created within the site.

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Soprano pipistrelle – Pipistrellus pygmaeus

Leisler's bat – Nyctalus Leisleri

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Potential impact on bat roosts, flight paths and feeding areas.

(1) Roost loss - Although no roosts were found on this occasion, there is low potential for roosts within the buildings. Provision of bat boxes will lead to a long-term positive effect on individual bats.

(2) Loss of feeding – Four species fed and commuted over the buildings overnight. With planting from the All-Ireland pollinator plan, there will be a long-term neutral effect on individual bats.

(3) Light pollution – Lux levels on the site are low throughout the night. Even with mitigation, there is likely to be some light spillage on the site in the future. This will have a mild long-term negative effect on individual bats.

Recommendations

(1)Two 1FF Schwegler bat boxes with built-in timber panel bat boxes must be put in place. These should be placed on the buildings or trees, at least 3m high, with a clear drop below (as bats need to drop to start their flight). These can be purchased from www.nhbs.com or Amazon.fr .They must be placed in a dark area.

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(4)No bats were found to be roosting within the trees. However, if any mature, ivy clad trees with cavities are felled, this must be preceded by a bat survey.

Bat Biology

Female bats gather in groups known as maternity roosts in summer to have their young. They generally have one baby each year, so are slow to reproduce, and disturbance of a maternity roost can be catastrophic.

In winter bats move to old stonework, trees, and caves to hibernate. They are especially vulnerable here as they are slow to awaken, and if tree felling is carried out, they can easily be killed.

Legislation

Bats are protected under the 1996 Wildlife Act, the 2000 Wildlife (Amendment) Act, Stat Ist 94 of 1997, Stat Ist 378 of 2005, The Habitats Directive, The Bonn and Bern Convention, and the Euro bats agreement.

The European Community (Natural Habitats) Regulations S.I. No 94 of 1997 states:

23(1) The minister shall take the requisite measures to establish a system of strict protection for the fauna consisting of the animal species set out in Part 1 of the First Schedule prohibiting –

a) All forms of deliberate capture or killing of specimens of those species in the wild.

1. The deterioration or destruction of breeding sites or resting places of those species.

The EU Habitats Directive

Article 12(1) of the 'Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (Habitats Directive) states:

"Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV(a) and their natural range, prohibiting:

a) all forms of deliberate capture or killing of specimens of these species in the wild.

b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation, and migration.

c) deliberate destruction or taking of eggs from the wild.

d. deterioration or destruction of breeding sites or resting places."

The EU Habitats Directive (92/43/EEC) lists all Irish bat species in Annex IV and one Irish species, the lesser horseshoe bat (Rhinolophus hipposideros), in Annex II. Annex II includes animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation (SACs) because they are endangered, rare, vulnerable, or endemic. Annex IV includes various species that require strict protection. Article 11 of the Habitats Directive requires member states to monitor all species listed in the Habitats Directive and Article 17 requires States to report to the EU on the findings of monitoring schemes.

The Bern and Bonn Conventions

Ireland is also a signatory to a number of conservation agreements pertaining to bats such as the Bern and Bonn Conventions. The European Bats Agreement (EUROBATS) is an agreement under the Bonn Convention. Ireland and the UK are two of the 31 signatories. The Agreement has an Action Plan with priorities for implementation. Devising strategies for monitoring of populations of selected bat species in Europe is among the resolutions of EUROBATS.

1.3.1 The Berne Convention

Article 6 of the "Convention on the Conservation of European Wildlife and Natural Habitats' (Berne Convention) reads:

"Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the special protection of the wild fauna species specified in Appendix II. The following will in particular be prohibited for these species:

a) all forms of deliberate capture and keeping and deliberate killing.

b) the deliberate damage to or destruction of breeding or resting sites.

c) the deliberate disturbance of wild fauna, particularly during the period of breeding, rearing and hibernation, insofar as disturbance would be significant in relation to the objectives of this Convention; ...

Appendix II lists strictly protected fauna species and this list includes "Microchiroptera, all species except Pipistrellus pipistrelles".

The EUROBATS Agreement

The 'Agreement on the Conservation of Populations of European Bats' (EUROBATS) was negotiated under the 'Convention for the Conservation of Migratory Wild Species' (Bonn Convention) and came into force in January 1994. The legal protection of bats and their habitats are given in Article III as fundamental obligations:

"1. Each Party shall prohibit the deliberate capture, keeping or killing of bats except under permit from its competent authority.

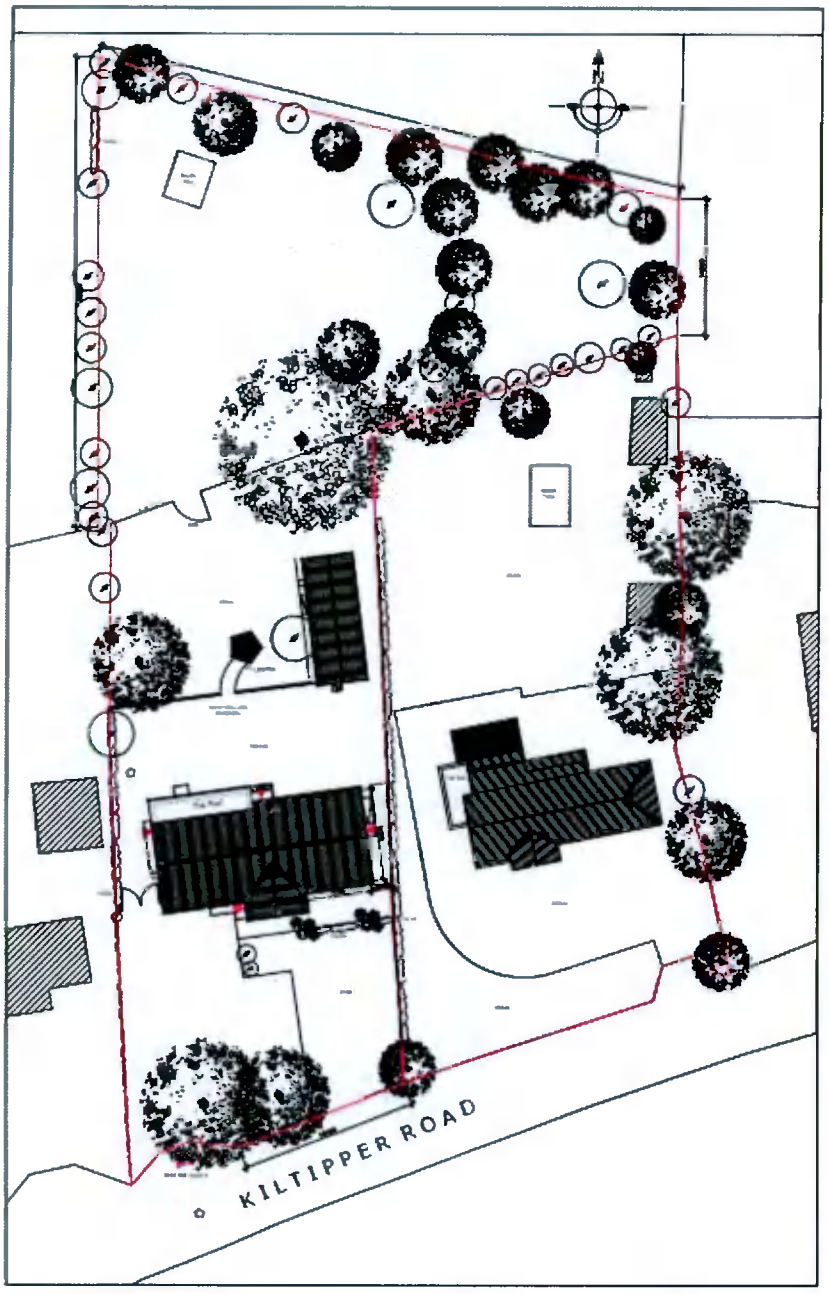
2. Each Party shall identify those sites within its own area of jurisdiction which are important for the conservation status, including for the shelter and protection, of bats. It shall, taking into account as necessary economic and social considerations, protect such sites from damage or disturbance. In addition, each Party shall endeavour to identify and protect important feeding areas for bats from damage or disturbance."

The Agreement covers all European bat species.

Contact Details: I can be contacted at 087 7454233. My email is donnamullen@wildlifesurveys.net and web site is www.wildlifesurveys.net

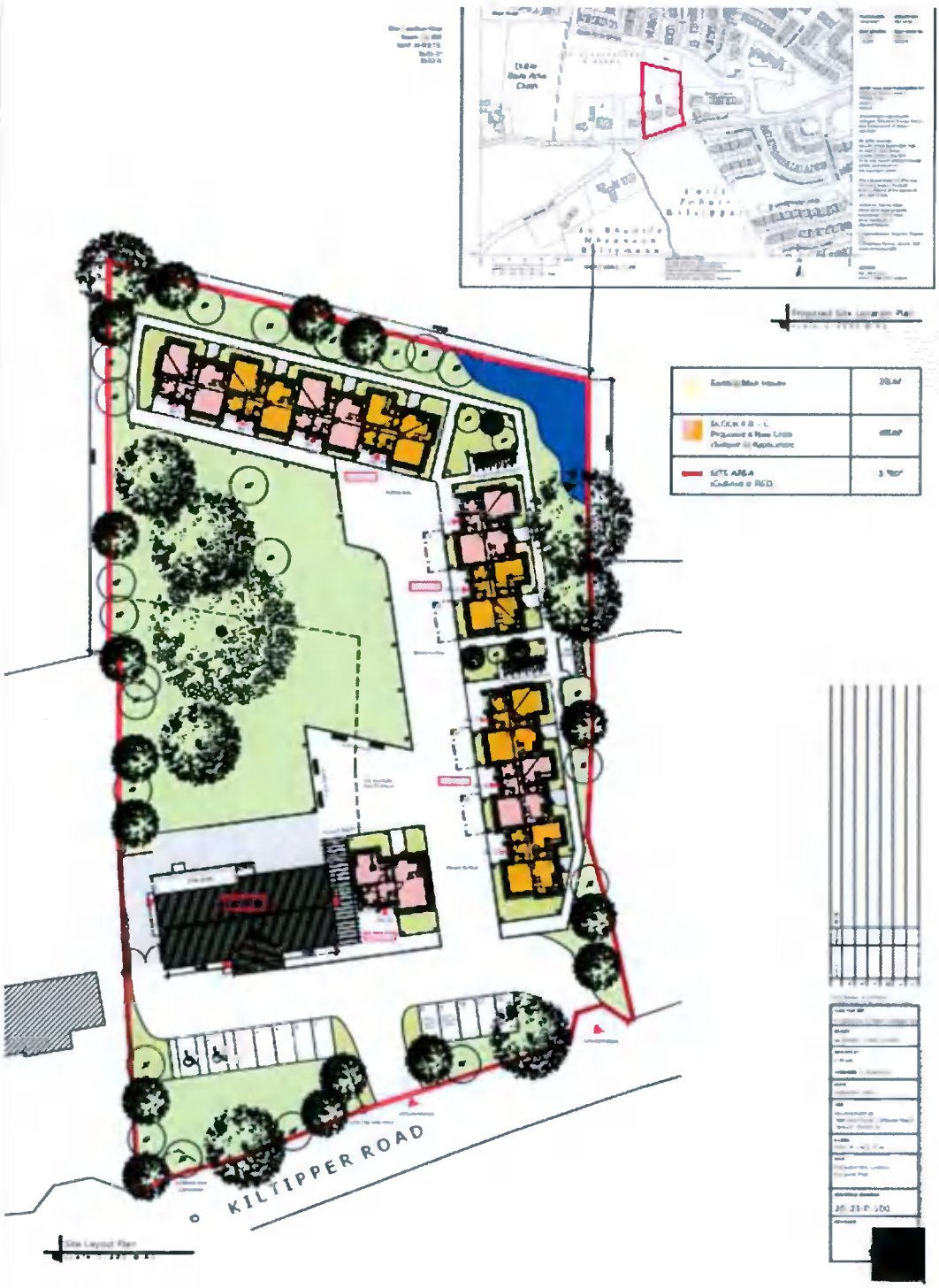
Appendix 1

Site Plan



Site Layout Plan

20-23-P-200



Appendix II

Song Meter mini recordings

File Help

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File Help

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File Help

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102		DM1_20210818_234644.wav	DM1_20210818_234644_000.wav		PIPPIP	17	17	1.000000	
103		DM1_20210819_054731.wav	DM1_20210819_054731_000.wav		PIPPIP	15	15	1.000000	
104		DM1_20210818_223619.wav	DM1_20210818_223619_000.wav		PIPPIP	16	13	0.813000	
105		DM1_20210819_021913.wav	DM1_20210819_021913_000.wav		PIPPIP	12	11	0.917000	
106		DM1_20210818_210637.wav	DM1_20210818_210637_000.wav		PIPPIP	17	8	0.471000	
107		DM1_20210818_233423.wav	DM1_20210818_233423_000.wav		PIPPIP	4	4	1.000000	
108		DM1_20210818_205131.wav	DM1_20210818_205131_000.wav		PIPPIP	4	3	0.750000	
109		DM1_20210819_041122.wav	DM1_20210819_041122_000.wav		PIPPIP	3	2	0.667000	
110		DM1_20210818_210919.wav	DM1_20210818_210919_000.wav		PIPPYG	55	55	1.000000	
111		DM1_20210818_230320.wav	DM1_20210818_230320_000.wav		PIPPYG	65	51	0.785000	
112		DM1_20210819_021206.wav	DM1_20210819_021206_000.wav		PIPPYG	54	49	0.907000	
113		DM1_20210818_211702.wav	DM1_20210818_211702_000.wav		PIPPYG	49	44	0.898000	
114		DM1_20210818_231036.wav	DM1_20210818_231036_000.wav		PIPPYG	51	43	0.843000	
115		DM1_20210818_224418.wav	DM1_20210819_224418_000.wav		PIPPYG	34	34	1.000000	
116		DM1_20210819_045700.wav	DM1_20210819_045700_000.wav		PIPPYG	39	34	0.872000	
117		DM1_20210819_020633.wav	DM1_20210819_020633_000.wav		PIPPYG	39	32	0.821000	
118		DM1_20210819_011712.wav	DM1_20210819_011712_000.wav		PIPPYG	42	32	0.762000	
119		DM1_20210819_045342.wav	DM1_20210819_045342_000.wav		PIPPYG	43	32	0.744000	
120		DM1_20210819_002853.wav	DM1_20210819_002853_000.wav		PIPPYG	38	31	0.816000	
121		DM1_20210819_045102.wav	DM1_20210819_045102_000.wav		PIPPYG	38	31	0.816000	
122		DM1_20210819_020247.wav	DM1_20210819_020247_000.wav		PIPPYG	40	31	0.775000	
123		DM1_20210818_234011.wav	DM1_20210818_234011_000.wav		PIPPYG	34	29	0.853000	
124		DM1_20210819_031551.wav	DM1_20210819_031551_000.wav		PIPPYG	32	27	0.844000	
125		DM1_20210818_235253.wav	DM1_20210818_235253_000.wav		PIPPYG	31	26	0.839000	
126		DM1_20210819_045240.wav	DM1_20210819_045240_000.wav		PIPPYG	32	26	0.813000	
127		DM1_20210819_045443.wav	DM1_20210819_045443_000.wav		PIPPYG	38	26	0.684000	
128		DM1_20210819_054237.wav	DM1_20210819_054237_000.wav		PIPPYG	25	25	1.000000	
129		DM1_20210818_210913.wav	DM1_20210818_210913_000.wav		PIPPYG	26	25	0.962000	
130		DM1_20210818_222114.wav	DM1_20210818_222114_000.wav		PIPPYG	24	24	1.000000	
131		DM1_20210819_003340.wav	DM1_20210819_003340_000.wav		PIPPYG	31	24	0.774000	
132		DM1_20210819_045419.wav	DM1_20210819_045419_000.wav		PIPPYG	40	24	0.600000	

File Help

	FOLDER	IN FILE	OUT FILE FS	OUT FILE ZC	AUTO ID	PULSES	MATCHING	MATCH RATIO
133		DM1_20210819_054213.wav	DM1_20210819_054213_000.wav		PIPPYG	23	23	1.000000
134		DM1_20210819_045255.wav	DM1_20210819_045255_000.wav		PIPPYG	29	23	0.793000
135		DM1_20210819_050049.wav	DM1_20210819_050049_000.wav		PIPPYG	31	23	0.742000
136		DM1_20210818_224854.wav	DM1_20210818_224854_000.wav		PIPPYG	22	22	1.000000
137		DM1_20210819_015620.wav	DM1_20210819_015620_000.wav		PIPPYG	22	22	1.000000
138		DM1_20210819_050003.wav	DM1_20210819_050003_000.wav		PIPPYG	26	22	0.846000
139		DM1_20210819_045734.wav	DM1_20210819_045734_000.wav		PIPPYG	27	22	0.815000
140		DM1_20210819_050022.wav	DM1_20210819_050022_000.wav		PIPPYG	31	22	0.710000
141		DM1_20210819_030213.wav	DM1_20210819_030213_000.wav		PIPPYG	27	21	0.778000
142		DM1_20210819_050105.wav	DM1_20210819_050105_000.wav		PIPPYG	29	21	0.724000
143		DM1_20210818_222513.wav	DM1_20210818_222513_000.wav		PIPPYG	20	20	1.000000
144		DM1_20210819_045838.wav	DM1_20210819_045838_000.wav		PIPPYG	24	20	0.833000
145		DM1_20210819_050132.wav	DM1_20210819_050132_000.wav		PIPPYG	24	20	0.833000
146		DM1_20210819_045718.wav	DM1_20210819_045718_000.wav		PIPPYG	26	20	0.769000
147		DM1_20210819_035950.wav	DM1_20210819_035950_000.wav		PIPPYG	21	19	0.905000
148		DM1_20210819_045507.wav	DM1_20210819_045507_000.wav		PIPPYG	26	19	0.731000
149		DM1_20210819_050224.wav	DM1_20210819_050224_000.wav		PIPPYG	28	19	0.679000
150		DM1_20210818_233955.wav	DM1_20210818_233955_000.wav		PIPPYG	23	18	0.783000
151		DM1_20210819_045522.wav	DM1_20210819_045522_000.wav		PIPPYG	24	18	0.750000
152		DM1_20210819_045823.wav	DM1_20210819_045823_000.wav		PIPPYG	30	18	0.600000
153		DM1_20210819_010207.wav	DM1_20210819_010207_000.wav		PIPPYG	22	17	0.773000
154		DM1_20210819_045856.wav	DM1_20210819_045856_000.wav		PIPPYG	24	17	0.708000
155		DM1_20210819_004737.wav	DM1_20210819_004737_000.wav		PIPPYG	26	17	0.654000
156		DM1_20210818_212051.wav	DM1_20210818_212051_000.wav		PIPPYG	14	14	1.000000
157		DM1_20210818_225135.wav	DM1_20210818_225135_000.wav		PIPPYG	14	14	1.000000
158		DM1_20210819_050147.wav	DM1_20210819_050147_000.wav		PIPPYG	17	14	0.824000
159		DM1_20210819_045315.wav	DM1_20210819_045315_000.wav		PIPPYG	20	14	0.700000
160		DM1_20210819_050212.wav	DM1_20210819_050212_000.wav		PIPPYG	18	13	0.722000
161		DM1_20210818_231231.wav	DM1_20210818_231231_000.wav		PIPPYG	12	12	1.000000
162		DM1_20210819_045435.wav	DM1_20210819_045435_000.wav		PIPPYG	14	12	0.857000
163		DM1_20210819_045759.wav	DM1_20210819_045759_000.wav		PIPPYG	15	12	0.800000
164		DM1_20210818_233750.wav	DM1_20210818_233750_000.wav		PIPPYG	10	10	1.000000
165		DM1_20210819_054025.wav	DM1_20210819_054025_000.wav		PIPPYG	10	10	1.000000
166		DM1_20210819_050945.wav	DM1_20210819_050945_000.wav		PIPPYG	11	10	0.909000
167		DM1_20210819_050252.wav	DM1_20210819_050252_000.wav		PIPPYG	14	10	0.714000
168		DM1_20210819_045222.wav	DM1_20210819_045222_000.wav		PIPPYG	16	10	0.625000
169		DM1_20210819_025308.wav	DM1_20210819_025308_000.wav		PIPPYG	9	9	1.000000
170		DM1_20210819_050038.wav	DM1_20210819_050038_000.wav		PIPPYG	8	8	1.000000
171		DM1_20210819_014041.wav	DM1_20210819_014041_000.wav		PIPPYG	9	8	0.889000
172		DM1_20210819_045357.wav	DM1_20210819_045357_000.wav		PIPPYG	9	8	0.889000
173		DM1_20210819_045459.wav	DM1_20210819_045459_000.wav		PIPPYG	10	8	0.800000

159		DM1_20210819_045315.wav	DM1_20210819_045315_000.wav		PIPPYG	20	14	0.700000	
160		DM1_20210819_050212.wav	DM1_20210819_050212_000.wav		PIPPYG	18	13	0.722000	
161		DM1_20210818_231231.wav	DM1_20210818_231231_000.wav		PIPPYG	12	12	1.000000	
162		DM1_20210819_045435.wav	DM1_20210819_045435_000.wav		PIPPYG	14	12	0.857000	
163		DM1_20210819_045759.wav	DM1_20210819_045759_000.wav		PIPPYG	15	12	0.800000	
164		DM1_20210818_233750.wav	DM1_20210818_233750_000.wav		PIPPYG	10	10	1.000000	
165		DM1_20210819_054025.wav	DM1_20210819_054025_000.wav		PIPPYG	10	10	1.000000	
166		DM1_20210819_050945.wav	DM1_20210819_050945_000.wav		PIPPYG	11	10	0.909000	
167		DM1_20210819_050252.wav	DM1_20210819_050252_000.wav		PIPPYG	14	10	0.714000	
168		DM1_20210819_045222.wav	DM1_20210819_045222_000.wav		PIPPYG	16	10	0.625000	
169		DM1_20210819_025308.wav	DM1_20210819_025308_000.wav		PIPPYG	9	9	1.000000	
170		DM1_20210819_050038.wav	DM1_20210819_050038_000.wav		PIPPYG	8	8	1.000000	
171		DM1_20210819_014041.wav	DM1_20210819_014041_000.wav		PIPPYG	9	8	0.889000	
172		DM1_20210819_045357.wav	DM1_20210819_045357_000.wav		PIPPYG	9	8	0.889000	
173		DM1_20210819_045459.wav	DM1_20210819_045459_000.wav		PIPPYG	10	8	0.800000	
174		DM1_20210818_234658.wav	DM1_20210818_234658_000.wav		PIPPYG	7	7	1.000000	
175		DM1_20210819_003301.wav	DM1_20210819_003301_000.wav		PIPPYG	14	7	0.500000	
176		DM1_20210819_025601.wav	DM1_20210819_025601_000.wav		PIPPYG	5	5	1.000000	
177		DM1_20210819_035511.wav	DM1_20210819_035511_000.wav		PIPPYG	5	4	0.800000	PIP
178		DM1_20210819_020624.wav	DM1_20210819_020624_000.wav		PLEAUR	6	6	1.000000	PIP
179		DM1_20210818_222904.wav	DM1_20210818_222904_000.wav		PLEAUR	8	3	0.375000	PIP
180		DM1_20210819_041134.wav	DM1_20210819_041134_000.wav		PLEAUR	10	3	0.300000	PIP
181		DM1_20210818_222837.wav	DM1_20210818_222837_000.wav		PLEAUR	2	1	0.500000	PIP
182		DM1_20210818_222841.wav	DM1_20210818_222841_000.wav		PLEAUR	3	1	0.333000	PIP

Appendix III

Bat records within 10km of the site

BCIreland data: search results 20 Aug 2021					
Search parameters: Roosts Transects Ad-hoc observation sites with observations of Myotis brandti Myotis daubentonii Myotis mystacinus Myotis mystacinus/brandtii Myotis natterreri Myotis spp. Nyctalus leisleri Pipistrellus nathusii Pipistrellus pipistrellus (45kHz) Pipistrellus pygmaeus Pipistrellus spp. (45kHz/55kHz) Plecotus auritus Rhinolophus hipposideros Unidentified bat within 10000m of O0834125464.					
Roosts					
Name	Grid refere	Grid refea	Grid refnor	Address	Species observed

	nce	sting	thing		
139 Stillorgan Rd	O1830	318000	230000	BelfieldDublin 4; County Dublin	Unidentified bat
2 Louvain	O1829	318000	229000	Clonskeagh; County Dublin	Nyctalus leisleri; Unidentified bat
23 Woodbrook Park	O12728 1	312700	228100	Templeogue; County Dublin	Nyctalus leisleri
3 Castles	O0161 64	301600	216400	Blessington; County Wicklow	Pipistrellus pygmaeus
33 Inchicore Rd	O1234	312000	234000	Inchicore Rd; Dublin 8; County Dublin	Unidentified bat
4 Crookshare	O0125	301000	225000	Rathcoole; County Dublin	Unidentified bat
60 Cremore	O1227	312000	227000	Templeogue; Dublin 16; County Dublin	Unidentified bat
7 Stirling Park	O1530	315000	230000	Orwell Road; Rathgar; Dublin 14	Unidentified bat
71 Forest Hill	O0226	302000	226000	Rathcoole; County Dublin	Unidentified bat
Airlie Stud Stable Block; Adamstown ; Co. Dublin	O0203 36	302000	233600	Airlie Stud Stable Block; Adamstown; Co. Dublin	Unidentified bat
Barnacullia	O1724	317000	224000	Sandyford; Dublin 18	Unidentified bat
Boland\\\'s Mill	O1745 93386 4	317459	233864	Grand Canal Dock; Dublin 2; County Dublin	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Cheeverstown house	O1252 85	312500	228500	Templeogue; Dublin 6W	Pipistrellus pygmaeus

Church at St. Mary\\\'s Hospital	O1 06 34 7	31 06 00	234 700	Phoenix Park; Dublin 20; County Dublin	Plecotus auritus
Church of the Nativity of the Blessed Mary	O0 39 00 26 70 0	30 39 00	226 700	Garters Lane; Saggart; Co. Dublin	Plecotus auritus
Corner Park Farm	O0 02 92 29 28 7	30 02 92	229 287	Corner Park Farm;Peamount Road; R120;Cornerpark;Newcastle;Co. Dublin	
Esker House	O0 37 34 3	30 37 00	234 300	Lucan; County Dublin	Pipistrellus spp. (45kHz/55kHz); Plecotus auritus
Former Pathology Building	O1 59 33 0	31 59 00	233 000	Former UCD Campus; at the rear of the National Concert Hall; Earlsfort Terrace; Dublin 2; County Dublin	Pipistrellus pygmaeus
Gleeson Residence Kilteel	N9 90 21 7	29 90 00	221 700	Kilteel; County Kildare	Pipistrellus spp. (45kHz/55kHz)
Grange Hill	O1 63 80 25 53 2	31 63 80	225 532	Grange HillDeerfieldHarold\ \\'s Grange RoadRathfarnham Dublin	Myotis natterreri; Pipistrellus pipistrellus (45kHz)
House roost; Tinode	O0 12 15 19 82 4	30 12 15	219 824	Mark Mullen;Lamb Hill;Tinode;manor Kilbride;Co. Wicklow	Pipistrellus pygmaeus
Industrial buildings; Former Paper Mills	O1 74 58 30 83 0	31 74 58	230 830	Clonskeagh Road; Clonskeagh; County Dublin	Pipistrellus pipistrellus (45kHz)

Kingsfurze	O0 83 5	30 80 00	235 000	Old lucan rd; Palmerstown; Dublin 20	Unidentified bat
Knockmary Hill Lodge	O1 04 34 7	31 04 00	234 700	Phoenix Park; Dublin 8; County Dublin	Pipistrellus spp. (45kHz/55kHz)
Lucan Spa Hotel Roost	O0 24 35 1	30 24 00	235 100	Lucan; Co. Dublin	Pipistrellus spp. (45kHz/55kHz)
Mc Kee Barracks	O1 33 5	31 30 00	235 000	Phoenix Park; Dublin 7	Myotis mystacinus
National Concert Hall	O1 59 34 32 98 8	31 59 34	232 988	Earlsfort TerraceDublin 2	Pipistrellus pygmaeus
Old shower block	O1 21 34 5	31 21 00	234 500	Magazine Fort; Phoenix Park; County Dublin	Pipistrellus spp. (45kHz/55kHz)
Open fronted industrial unit	O1 74 58 30 83 0	31 74 58	230 830	Former Paper Mills site; Clonskeagh Road; Clonskeagh; County Dublin	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Private Residence; Tobermaclu gg Lane; Lucan; Co. Dublin	O0 17 24 4	30 17 00	224 400	Private Residence;Toberm aclugg Lane; Lucan; Co. Dublin	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Rathcoole House	O0 19 26 8	30 19 00	226 800	Rathcoole; County Dublin	Unidentified bat
Shed at Deerkeeper \'s Lodge	O1 14 34 3	31 14 00	234 300	Phoenix Park; County Dublin	Plecotus auritus
St John the Baptist Cloghleagh	O0 48 16 4	30 48 00	216 400	Cloghleagh; Blessington; County Wicklow	Pipistrellus spp. (45kHz/55kHz); Plecotus auritus

St Marys	O1 53 3	31 50 00	233 000	Grange Rd; Rathfarnam; Dublin 6; County Dublin	Nyctalus leisleri
St Marys	O1 33 5	31 30 00	235 000	Phoenix Park; Dublin	Nyctalus leisleri
St Pius	O1 53 3	31 50 00	233 000	Fortfield; Dublin	Unidentified bat
St. Finian's School Newcastle	N9 99 77 28 60 4	29 99 77	228 604	St. Finian's School;Newcastle; Co. Dublin	Pipistrellus spp. (45kHz/55kHz)
Stables	O0 00 00 28 00 0	30 00 00	228 000	Newcastle Lyons; Newcastle; Co. Dublin.	Pipistrellus spp. (45kHz/55kHz)
Tandys Lane Farmhouse; Adamstown ; Co. Dublin	O0 25 33 4	30 25 00	233 400	Tandys Lane farmhouse;Tandys Lane; Adamstown;Lucan; Co. DUblin.	Plecotus auritus; Unidentified bat
Tibradden Stableyard; Tibradden House; Rathfarnha m; Dublin 16	O1 41 24 3	31 41 00	224 300	Cloragh Yard & Tibradden Stableyard;Tibradd en House; Mutton Lane; Rathfarnham; Dublin 16	Pipistrellus spp. (45kHz/55kHz)
Two storey house; Balgarra	O1 82 24 8	31 82 00	224 800	Enniskerry Road; County Dublin	Pipistrellus pipistrellus (45kHz)
Two storey house; Grasslands	O1 82 24 9	31 82 00	224 900	Enniskerry Road; County Dublin	Pipistrellus pipistrellus (45kHz); Plecotus auritus
Two storey house; Oakville House	N9 98 28 7	29 98 00	228 700	Main Street; Newcastle; County Dublin	Pipistrellus pygmaeus; Unidentified bat
Viking Component s Europe	O1 53 3	31 50 00	233 000	Citywest Business Campus; County Dublin	Unidentified bat

Whitechurch Church of Ireland	O1 47 25 7	31 47 00	225 700	Whitechurch; County Dublin	Plecotus auritus
Transects					
Name	Grid reference start	Grid ref start easting	Grid ref start northing	Species	
12th Lock; Lucan Road Bridge Transect	O0 29 80 32 23 6	30 29 80	232 236	Myotis daubentonii;Unidentified bat	
Ballydoden Road Transect; Dublin	O1 24 00 28 40 0	31 24 00	228 400		
Bridge on Spring Avenue	O1 36 10 28 91 0	31 36 10	228 910	Myotis daubentonii;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Unidentified bat	
Castle Kelly Bridge Transect	O0 95 54 21 77 5	30 95 54	221 775	Myotis daubentonii;Unidentified bat	
Castle Kelly Bridge Transect spot 1	O0 95 54 21 77 5	30 95 54	221 775	Myotis daubentonii;Nyctalus leisleri	
Castle Kelly Bridge Transect spot 10	O1 01 35 20 79 0	31 01 35	220 790	Myotis daubentonii;Myotis spp.;Nyctalus leisleri;Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat	

Castle Kelly Bridge Transect spot 2	O0 96 19 21 68 7	30 96 19	221 687	Myotis daubentonii;Nyctalus leisleri;Unidentified bat	
Castle Kelly Bridge Transect spot 3	O0 96 73 21 57 9	30 96 73	221 579	Myotis daubentonii;Nyctalus leisleri	
Castle Kelly Bridge Transect spot 4	O0 97 54 21 49 3	30 97 54	221 493	Myotis daubentonii;Nyctalus leisleri	
Castle Kelly Bridge Transect spot 5	O0 98 14 21 40 7	30 98 14	221 407	Myotis daubentonii;Unidentified bat	
Castle Kelly Bridge Transect spot 6	O0 99 05 21 28 3	30 99 05	221 283	Myotis daubentonii;Nyctalus leisleri	
Castle Kelly Bridge Transect spot 7	O0 99 87 21 13 3	30 99 87	221 133	Myotis daubentonii;Myotis spp.;Nyctalus leisleri;Pipistrellus pygmaeus;Unidentified bat	
Castle Kelly Bridge Transect spot 8	O1 00 20 20 97 9	31 00 20	220 979	Nyctalus leisleri	
Castle Kelly Bridge Transect spot 9	O1 00 73 20 88 0	31 00 73	220 880	Myotis daubentonii;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus spp. (45kHz/55kHz);Unidentified bat	

Castletown Estate Transect	N9 92 04 34 11 9	29 92 04	234 119	Myotis daubentonii;Nyctalus leisleri;Pipistrellus spp. (45kHz/55kHz);Unidentified bat
Clonskeagh Bridge Transect	O1 68 04 30 21 4	31 68 04	230 214	Myotis daubentonii;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat
Clonskeagh Bridge Transect; Spot 1	O1 68 04 30 21 4	31 68 04	230 214	Myotis daubentonii;Nyctalus leisleri;Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat
Clonskeagh Bridge Transect; Spot 10	O1 74 33 30 67 8	31 74 33	230 678	Myotis daubentonii;Myotis spp.;Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat
Clonskeagh Bridge Transect; Spot 2	O1 68 35 30 31 3	31 68 35	230 313	Myotis daubentonii;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat
Clonskeagh Bridge Transect; Spot 3	O1 68 73 30 40 0	31 68 73	230 400	Myotis daubentonii;Myotis spp.;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Unidentified bat
Clonskeagh Bridge Transect; Spot 4	O1 69 09 30 48 6	31 69 09	230 486	Myotis daubentonii;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Unidentified bat
Clonskeagh Bridge Transect; Spot 5	O1 70 03 30 56 2	31 70 03	230 562	Myotis daubentonii;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus spp. (45kHz/55kHz);Unidentified bat

Clonskeagh Bridge Transect; Spot 6	O1 70 85 30 56 6	31 70 85	230 566	Myotis daubentonii;Myotis spp.;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Unidentified bat	
Clonskeagh Bridge Transect; Spot 7	O1 71 54 30 60 6	31 71 54	230 606	Myotis daubentonii;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Unidentified bat	
Clonskeagh Bridge Transect; Spot 8	O1 72 32 30 65 8	31 72 32	230 658	Myotis daubentonii;Myotis spp.;Nyctalus leisleri;Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat	
Clonskeagh Bridge Transect; Spot 9	O1 73 59 30 68 9	31 73 59	230 689	Myotis daubentonii;Nyctalus leisleri;Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat	
Dolphins Barn; Dublin Transect	O1 36 89 32 68 4	31 36 89	232 684		
Hazelhatch Bridge Transect	N9 88 00 30 70 0	29 88 00	230 700	Myotis daubentonii;Unidentified bat	
Herbert Park (Ballsbridge) Transect	O1 78 80 32 42 8	31 78 80	232 428		
Kilmainham Section (Inchicore) Transect	O1 28 00 33 20 0	31 28 00	233 200	Myotis daubentonii;Unidentified bat	

Milltown Bridge Transect	O1 64 07 30 02 3	31 64 07	230 023	Myotis daubentonii;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Unidentified bat	
Newbridge Firhouse Transect	O1 14 61 27 74 6	31 14 61	227 746	Myotis daubentonii;Unidentified bat	
Newbridge Firhouse Transect; Spot 1	O1 14 61 27 74 6	31 14 61	227 746	Pipistrellus pygmaeus	
Newbridge Firhouse Transect; Spot 10	O1 05 61 27 16 8	31 05 61	227 168	Myotis daubentonii;Unidentified bat	
Newbridge Firhouse Transect; Spot 2	O1 13 23 27 73 5	31 13 23	227 735	Myotis daubentonii;Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz)	
Newbridge Firhouse Transect; Spot 3	O1 12 22 27 72 4	31 12 22	227 724	Myotis daubentonii;Myotis spp.;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz)	
Newbridge Firhouse Transect; Spot 4	O1 11 05 27 71 6	31 11 05	227 716	Myotis daubentonii;Pipistrellus pygmaeus	
Newbridge Firhouse Transect; Spot 5	O1 09 70 27 70 3	31 09 70	227 703	Pipistrellus spp. (45kHz/55kHz)	

Newbridge Firhouse Transect; Spot 6	O1 08 84 27 60 0	31 08 84	227 600	Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat	
Newbridge Firhouse Transect; Spot 7	O1 08 11 27 49 8	31 08 11	227 498	Myotis daubentonii;Myotis spp.;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Pipistrellus spp. (45kHz/55kHz);Unidentified bat	
Newbridge Firhouse Transect; Spot 8	O1 07 42 27 34 5	31 07 42	227 345	Myotis spp.	
Newbridge Firhouse Transect; Spot 9	O1 06 55 27 27 2	31 06 55	227 272	Myotis daubentonii;Myotis spp.;Unidentified bat	
Newcastle Lyons	O0 00 00 28 00 0	30 00 00	228 000	Nyctalus leisleri;Pipistrellus pipistrellus (45kHz)	
Oldbawn Bridge Transect	O0 97 50 26 30 0	30 97 50	226 300	Myotis daubentonii;Unidentified bat	
Portobello Grove Rd Transect	O1 56 85 32 46 5	31 56 85	232 465	Myotis daubentonii;Unidentified bat	
Rathfarnham Rd R114 Bridge Transect	O1 44 24 29 68 9	31 44 24	229 689	Myotis daubentonii;Unidentified bat	

Transect 1: Ballinascorney	O0748319548	307483	219548	Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus	
Transect 2: Ballinascorney	O0695819411	306958	219411	Nyctalus leisleri;Pipistrellus pipistrellus (45kHz)	
Transect 3: Ballinascorney	O0755221306	307552	221306	Myotis spp.;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus pygmaeus;Plecotus auritus;Unidentified bat	
Transect 4: Ballinascorney	O0750722060	307507	222060	Myotis spp.;Nyctalus leisleri;Pipistrellus pipistrellus (45kHz);Pipistrellus spp. (45kHz/55kHz)	
War Memorial Garden Transect	O1700341500	317000	234150	Myotis daubentonii;Unidentified bat	
Ad-hoc observations					
Survey	Grid reference	Grid reference easting	Grid reference northing	Date	Species
Bat Survey - Scott Cawley	O1565834626	315658	234626	25/07/2005	Nyctalus leisleri
Bat Survey - Scott Cawley	O1792533	317900	225300	31/07/2010	Nyctalus leisleri; Pipistrellus pygmaeus

Bat Survey - Scott Cawley	O0 53 27 4	30 53 00	227 400	21/08/2007	Nyctalus leisleri; Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	O1 61 30 4	31 61 00	230 400	25/06/2009	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O0 62 31 7	30 62 00	231 700	05/09/2011	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O0 44 30 5	30 44 00	230 500	01/05/2006	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1 45 27 4	31 45 00	227 400	09/09/2010	Nyctalus leisleri
Bat Survey - Scott Cawley	O0 40 29 8	30 40 00	229 800	11/06/2003	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O0 94 35 4	30 94 00	235 400	18/07/2007	Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1 74 58 30 83 0	31 74 58	230 830	27/06/2013	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1 38 27 5	31 38 00	227 500	24/05/2007	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O1 30 27 3	31 30 00	227 300	21/10/2010	Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O1 72 26 9	31 72 00	226 900	15/06/2004	Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	N9 98 28 7	29 98 00	228 700	10/05/2010	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Unidentified bat

Bat Survey - Scott Cawley	O0 35 37 31 84 6	30 35 37	231 846	19/08/2013	Myotis daubentonii; Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1 78 32 4	31 78 00	232 400	19/06/2008	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1 76 29 2	31 76 00	229 200	15/04/2011	Myotis spp.; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Unidentified bat
Bat Survey - Scott Cawley	O1 74 59 33 86 4	31 74 59	233 864	12/05/2005	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1 81 30 1	31 81 00	230 100	24/05/2010	Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	o0 37 81 32 15 6	30 37 81	232 156	24/09/2015	
Bat Survey - Scott Cawley	O1 74 33 8	31 74 00	233 800	07/06/2006	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1 76 27 8	31 76 00	227 800	01/10/2009	Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O0 34 26 6	30 34 00	226 600	15/08/2011	Myotis spp.; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	O1 48 33 8	31 48 00	233 800	2006-07-00	Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O1 52	31 52 00	231 500	27/08/2010	Nyctalus leisleri; Pipistrellus spp. (45kHz/55kHz)

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Bat Survey - Scott Cawley	O0983313	309800	233100	27/05/2011	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O1133444	311300	234400	08/05/2007	Nyctalus leisleri; Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	O1052669	310500	226900	24/08/2012	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1717344	317100	234400	18/05/2006	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1663469	316600	234900	15/09/2010	Nyctalus leisleri; Pipistrellus nathusii; Pipistrellus pipistrellus (45kHz)
Bat Survey - Scott Cawley	O1353529	313500	232900	09/10/2003	Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	O1822488	318200	224800	08/06/2010	Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
Bat Survey - Scott Cawley	O1715533069	317155	233069	25/07/2013	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus spp. (45kHz/55kHz); Plecotus auritus
Bat Survey - Scott Cawley	O1482481	314800	224100	18/09/2008	Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O0773111	307700	231100	09/06/2010	Nyctalus leisleri; Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O1812844	318100	228400	01/04/2001	Nyctalus leisleri

Bat Survey - Scott Cawley	O1 73 31 2	31 73 00	231 200	11/05/2010	Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	O0 71 20 9	30 71 00	220 900	19/06/2012	Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Survey - Scott Cawley	O1 59 33 0	31 59 00	233 000	2009-05-00	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Survey - Scott Cawley	O0 37 34 3	30 37 00	234 300	28/04/2011	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus spp. (45kHz/55kHz); Unidentified bat
Bat Surveys - Tina Aughney	O0 52 8	30 50 00	228 000	17/07/2011	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 30 00 29 00 0	31 30 00	229 000	22/07/2007	Myotis daubentonii; Myotis mystacinus/brandtii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 82 08 31 01 6	31 82 08	231 016	23/04/2017	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 40 00 29 00 0	31 40 00	229 000	19/07/2007	Myotis daubentonii; Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Surveys - Tina Aughney	O0 07 27 9	30 07 00	227 900	29/06/2012	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 70 00 31 00 0	31 70 00	231 000	26/10/2007	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus

Bat Surveys - Tina Aughney	O1600030000	316000	230000	19/07/2007	Myotis daubentonii; Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Surveys - Tina Aughney	O0528	305000	228000	15/06/2017	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Bat Surveys - Tina Aughney	O1700027000	317000	227000	09/04/2001	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1700031000	317000	231000	19/07/2007	Myotis daubentonii; Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Surveys - Tina Aughney	O1015025329	310150	225329	23/05/2017	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O0420	304000	220000	14/09/2011	Myotis daubentonii; Myotis natterreri; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
Bat Surveys - Tina Aughney	O1300029000	313000	229000	20/07/2007	Myotis daubentonii; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
Bat Surveys - Tina Aughney	O0968425470	309684	225470	23/05/2017	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1627632173	316276	232173	07/09/2007	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus

Bat Surveys - Tina Aughney	O0 64 91 31 44 3	30 64 91	231 443	22/04/2011	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 30 00 29 00 0	31 30 00	229 000	27/07/2007	Myotis daubentonii; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 46 67 35 38 7	31 46 67	235 387	23/06/2018	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 50 00 29 00 0	31 50 00	229 000	19/07/2007	Myotis daubentonii; Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Surveys - Tina Aughney	O0 07 27 9	30 07 00	227 900	12/07/2011	Nyctalus leisleri; Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O0 80 00 32 00 0	30 80 00	232 000	28/06/2005	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O1 70 00 30 00 0	31 70 00	230 000	19/07/2007	Myotis daubentonii; Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
Bat Surveys - Tina Aughney	O1 05 80 25 36 6	31 05 80	225 366	23/05/2017	Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bat Surveys - Tina Aughney	O0 30 00 35	30 30 00	235 000	14/05/2002	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pygmaeus; Plecotus auritus

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Bat Surveys - Tina Aughney	O1750033600	317500	233600	30/06/2006	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Bat Surveys - Tina Aughney	O1013125531	310131	225531	23/05/2017	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2010	O1803490	318000	234900	01/06/2008	Unidentified bat
BATLAS 2010	O1211923826	312119	223826	04/09/2007	Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz); Plecotus auritus
BATLAS 2010	O1401633	314000	216300	26/09/2008	Myotis daubentonii; Pipistrellus pygmaeus
BATLAS 2010	O0752944	307500	229400	17/09/2008	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2010	O073170	307000	231000	27/06/2008	Pipistrellus pygmaeus
BATLAS 2010	O1362889	313600	228900	13/08/2008	Myotis spp.; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
BATLAS 2010	O1203533	312000	235300	30/09/2008	Myotis daubentonii; Pipistrellus spp. (45kHz/55kHz)
BATLAS 2010	O16333	316000	233000	16/06/2008	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2010	O108	310800	234700	30/09/2008	Plecotus auritus

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BATLAS 2010	O0432	304000	232000	21/05/2008	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
BATLAS 2010	O08332323	308300	232300	27/09/2008	Pipistrellus pipistrellus (45kHz)
BATLAS 2010	O14118 0	314100	218000	26/09/2008	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz)
BATLAS 2010	O06531 2	306500	231200	28/08/2008	Myotis daubentonii; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2010	O15078 24488	315078	224488	12/09/2007	Pipistrellus spp. (45kHz/55kHz)
BATLAS 2010	O12672 33130	312672	233130	28/08/2008	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus spp. (45kHz/55kHz)
BATLAS 2010	O11934 5	311900	234500	30/09/2008	Pipistrellus spp. (45kHz/55kHz)
BATLAS 2010	O1533	315000	233000	16/06/2008	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2010	O11534 4	311500	234400	30/09/2008	Nyctalus leisleri; Pipistrellus spp. (45kHz/55kHz); Plecotus auritus
BATLAS 2010	O0332	303000	232000	21/05/2008	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus

BATLAS 2010	O0 99 35 3	30 99 00	235 300	30/09/2008	Myotis natterreri
BATLAS 2020	O0 50 17 15 99 0	30 50 17	215 990	18/09/2015	Pipistrellus pipistrellus (45kHz)
BATLAS 2020	O0 29 06 32 23 5	30 29 06	232 235	06/08/2016	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2020	O0 89 81 24 45 2	30 89 81	224 452	07/07/2017	Myotis daubentonii; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2020	O0 63 85 16 52 4	30 63 85	216 524	18/09/2015	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2020	O0 39 47 34 30 7	30 39 47	234 307	02/09/2016	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2020	O0 41 52 26 98 4	30 41 52	226 984	03/08/2017	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2020	O0 63 62 17 51 0	30 63 62	217 510	18/08/2015	Myotis daubentonii; Pipistrellus pygmaeus
BATLAS 2020	O0 75 79 29	30 75 79	229 903	06/07/2017	

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BATLAS 2020	O0625322065	306253	222065	06/07/2017	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
BATLAS 2020	O0673432176	306734	232176	02/09/2016	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2020	O0235823502	302358	223502	03/08/2017	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
BATLAS 2020	O0242616153	302426	216153	30/07/2015	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pygmaeus
BATLAS 2020	O1151832922	311518	232922	20/10/2015	Pipistrellus nathusii; Pipistrellus pipistrellus (45kHz)
BATLAS 2020	O0575025322	305750	225322	06/07/2017	Pipistrellus pipistrellus (45kHz)
BATLAS 2020	O0488316599	304883	216599	17/09/2015	Nyctalus leisleri; Pipistrellus pygmaeus; Plecotus auritus
BATLAS 2020	O1073134719	310731	234719	08/10/2015	Pipistrellus nathusii

BATLAS 2020	O0 15 04 27 87 2	30 15 04	227 872	03/08/2017	Pipistrellus pipistrellus (45kHz)
BATLAS 2020	O0 27 63 18 04 2	30 27 63	218 042	17/09/2015	Myotis daubentonii; Myotis mystacinus; Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
BATLAS 2020	O0 70 07 30 99 9	30 70 07	230 999	02/09/2016	
BATLAS 2020	O0 30 86 22 81 9	30 30 86	222 819	03/08/2017	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Bats in Dublin's City Centre Parks and Waterways	O1 63 2	31 60 00	232 000	13/05/2000	Pipistrellus pipistrellus (45kHz)
Bats in Dublin's City Centre Parks and Waterways	O1 60 33 4	31 60 00	233 400	05/07/2000	Myotis mystacinus/brandtii
Bats in Dublin's City Centre Parks and Waterways	O1 60 33 4	31 60 00	233 400	10/05/2000	Pipistrellus pygmaeus
Buildings At Risk Grant; The Heritage Council	O0 39 00 26 70 0	30 39 00	226 700	20/09/2005	Pipistrellus pipistrellus (45kHz)
Cavan Bat Group	O1 65 00 26	31 65 00	226 200	18/08/2003	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus

	200				
Dublin Bat Group surveys	O1598298	315900	229800	18/08/1999	Pipistrellus pygmaeus
Dublin Bat Group surveys	O1526	315000	226000	18/08/1999	Nyctalus leisleri
Dublin Bat Group surveys	O1603334	316000	233400	05/07/2000	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Dublin Bat Group surveys	O1603334	316000	233400	10/05/2000	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
EIS and Road Surveys - Conor Kelleher	O0300031000	303000	231000	25/08/2002	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
EIS and Road Surveys - Conor Kelleher	O0700032000	307000	232000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0700035000	307000	235000	22/06/2005	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0800032000	308000	232000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0400032000	304000	232000	15/09/2002	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys -	O070 00	30 70 00	235 000	22/06/2005	Myotis daubentonii

Conor Kelleher	35 00 0				
EIS and Road Surveys - Conor Kelleher	O1 00 00 32 00 0	31 00 00	232 000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O1 30 00 34 00 0	31 30 00	234 000	12/07/2006	Pipistrellus pipistrellus (45kHz)
EIS and Road Surveys - Conor Kelleher	O1 50 00 25 00 0	31 50 00	225 000	22/06/2005	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0 20 00 31 00 0	30 20 00	231 000	25/08/2002	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
EIS and Road Surveys - Conor Kelleher	O0 30 00 32 00 0	30 30 00	232 000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0 30 00 32 00 0	30 30 00	232 000	25/08/2002	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
EIS and Road Surveys - Conor Kelleher	O0 40 00 32 00 0	30 40 00	232 000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0 70 00 32	30 70 00	232 000	22/06/2005	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus

	000				
EIS and Road Surveys - Conor Kelleher	O0500032000	305000	232000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0500032000	305000	232000	15/09/2002	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O1100027000	311000	227000	22/06/2005	Myotis daubentonii; Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0600032000	306000	232000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O0900032000	309000	232000	08/07/2007	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS and Road Surveys - Conor Kelleher	O1500026000	315000	226000	22/06/2005	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS surveys - Brian Keeley	O1815633046	318156	233046	12/07/2010	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS surveys - Brian Keeley	O1555026200	315550	226200	01/06/2004	Myotis daubentonii; Myotis mystacinus; Myotis mystacinus/brandtii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus

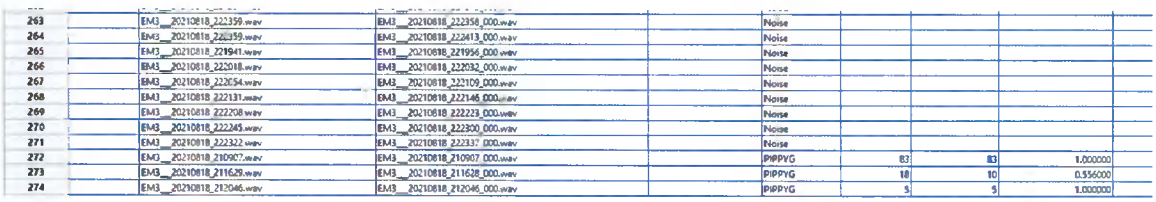
EIS surveys - Brian Keeley	N9 96 50 28 80 0	29 96 50	228 800	20/01/2006	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
EIS surveys - Brian Keeley	O1 63 86 25 56 9	31 63 86	225 569	04/08/2012	Nyctalus leisleri; Pipistrellus nathusii; Pipistrellus pygmaeus
EIS surveys - Brian Keeley	O0 77 87 29 76 3	30 77 87	229 763	14/09/2010	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
EIS surveys - Brian Keeley	O1 78 00 27 30 0	31 78 00	227 300	01/09/2004	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS surveys - Brian Keeley	O1 70 69 33 23 8	31 70 69	233 238	08/10/2009	Nyctalus leisleri; Pipistrellus nathusii; Pipistrellus pygmaeus
EIS surveys - Brian Keeley	O1 78 00 28 60 0	31 78 00	228 600	04/09/2003	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS surveys - Brian Keeley	O0 76 00 35 20 0	30 76 00	235 200	10/08/2006	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
EIS surveys - Brian Keeley	O1 81 74 33 02 4	31 81 74	233 024	24/05/2011	Myotis daubentonii; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus

EIS surveys - Brian Keeley	O1600002600 0	3160 00	226 000	18/08/2003	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
EIS Surveys - Niamh Roche	O1823334	3182 00	233 400	2004-09-00	Nyctalus leisleri
EIS Surveys - Niamh Roche	O0230035200	3023 00	235 200	02/08/2007	Nyctalus leisleri
EIS Surveys - Niamh Roche	O0230035200	3023 00	235 200	02/08/2007	Pipistrellus pygmaeus
EIS Surveys - Niamh Roche	O1833332	3183 00	233 200	2004-09-00	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
EIS Surveys - Niamh Roche	O0230034900	3023 00	234 900	02/08/2007	Pipistrellus pipistrellus (45kHz)
EIS Surveys - Niamh Roche	O0220034900	3022 00	234 900	02/08/2007	Myotis spp.
Faith Wilson	O023 3	3020 00	233 000	31/08/2009	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Plecotus auritus
Faith Wilson	O0473338	3047 00	233 800	12/07/2010	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz)
Faith Wilson	O0673314	3067 00	231 400	10/10/2018	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus

Faith Wilson	O1 63 2	31 60 00	232 000	08/10/2009	Nyctalus leisleri; Pipistrellus nathusii; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Faith Wilson	O0 13 3	30 10 00	233 000	01/09/2009	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Faith Wilson	O1 42 4	31 40 00	224 000	02/09/2009	Myotis natterreri; Myotis spp.; Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus; Pipistrellus spp. (45kHz/55kHz); Plecotus auritus
Faith Wilson	O1 45 26 7	31 45 00	226 700	31/10/2014	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Faith Wilson	O1 77 28 6	31 77 00	228 600	04/09/2003	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Faith Wilson	O1 49 33 3	31 49 00	233 300	01/08/2007	Nyctalus leisleri
Niamh Roche	O1 52 6	31 50 00	226 000	28/07/1999	Nyctalus leisleri; Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus
Niamh Roche	O0 88 34 9	30 88 00	234 900	20/04/2006	Pipistrellus pipistrellus (45kHz); Pipistrellus pygmaeus

Appendix IV

EM3 hand held detector with Kaleidoscope analysis – Hand held by Donna Mullen



263	EM3__20210818_222359.wav	EM3__20210818_222358_000.wav		Noise				
264	EM3__20210818_222359.wav	EM3__20210818_222413_000.wav		Noise				
265	EM3__20210818_221941.wav	EM3__20210818_221956_000.wav		Noise				
266	EM3__20210818_222018.wav	EM3__20210818_222032_000.wav		Noise				
267	EM3__20210818_222054.wav	EM3__20210818_222109_000.wav		Noise				
268	EM3__20210818_222131.wav	EM3__20210818_222146_000.wav		Noise				
269	EM3__20210818_222208.wav	EM3__20210818_222223_000.wav		Noise				
270	EM3__20210818_222245.wav	EM3__20210818_222300_000.wav		Noise				
271	EM3__20210818_222322.wav	EM3__20210818_222337_000.wav		Noise				
272	EM3__20210818_210907.wav	EM3__20210818_210907_000.wav		PIPPYG	83	83	1.000000	
273	EM3__20210818_211629.wav	EM3__20210818_211628_000.wav		PIPPYG	10	10	0.556000	
274	EM3__20210818_212046.wav	EM3__20210818_212046_000.wav		PIPPYG	5	5	1.000000	

Appendix V

EM3 bat detector handheld by Ferdia Keeley with Kaleidoscope analysis

File Help

	FOLDER	IN FILE	OUT FILE FS	OUT FILE ZC	AUTO ID	PULSES	MATCHING	MATCH RATIO	MANUA
1		_20210818_214131.wav	_20210818_214131_000.wav		NYCLEI	4	4	1.000000	NYCLEI
2		_20210819_054403.wav	_20210819_054403_000.wav		NYCLEI	2	2	1.000000	NYCLEI
3		_20210818_211025.wav	_20210818_211025_000.wav		NoID	2	0	0.000000	Noise
4		_20210818_211726.wav	_20210818_211726_000.wav		NoID	3	0	0.000000	Noise
5		_20210818_214251.wav	_20210818_214251_000.wav		NoID	2	0	0.000000	Noise
6		_20210818_214351.wav	_20210818_214406_000.wav		NoID	2	0	0.000000	Noise
7		_20210818_220415.wav	_20210818_220415_000.wav		NoID	3	0	0.000000	Noise
8		_20210818_221959.wav	_20210818_221959_000.wav		NoID	3	0	0.000000	Noise
9		_20210818_222019.wav	_20210818_222019_000.wav		NoID	2	0	0.000000	Noise
10		_20210819_045752.wav	_20210819_045752_000.wav		NoID	2	0	0.000000	Noise
11		_20210819_045711.wav	_20210819_045726_000.wav		NoID	2	0	0.000000	Noise
12		_20210819_045812.wav	_20210819_045812_000.wav		NoID	3	0	0.000000	Noise
955		_20210818_214351.wav	_20210818_214351_000.wav		PIPNAT	7	6	0.857000	Noise
956		_20210818_211005.wav	_20210818_211020_000.wav		PIPNAT	4	4	1.000000	Noise
957		_20210818_215614.wav	_20210818_215629_000.wav		PIPNAT	4	4	1.000000	Noise
958		_20210818_210203.wav	_20210818_210203_000.wav		PIPNAT	2	2	1.000000	Noise
959		_20210818_210824.wav	_20210818_210824_000.wav		PIPNAT	2	2	1.000000	Noise
960		_20210818_212608.wav	_20210818_212608_000.wav		PIPNAT	2	2	1.000000	Noise
961		_20210818_214752.wav	_20210818_214752_000.wav		PIPNAT	2	2	1.000000	Noise
962		_20210818_210804.wav	_20210818_210804_000.wav		PIPNAT	2	1	0.500000	Noise
963		_20210819_050333.wav	_20210819_050333_000.wav		PIPPIP	4	3	0.750000	Noise
964		_20210818_214111.wav	_20210818_214111_000.wav		PIPPYG	17	17	1.000000	Noise
965		_20210818_212107.wav	_20210818_212107_000.wav		PIPPYG	21	15	0.714000	Noise
966		_20210818_210925.wav	_20210818_210925_000.wav		PIPPYG	11	10	0.909000	PIP
967		_20210818_211606.wav	_20210818_211606_000.wav		PIPPYG	10	7	0.700000	Noise
968		_20210819_052358.wav	_20210819_052358_000.wav		PIPPYG	8	8	1.000000	PIPPYG
969		_20210819_050954.wav	_20210819_051009_000.wav		PIPPYG	5	5	1.000000	PIPPYG
970		_20210818_211325.wav	_20210818_211325_000.wav		PIPPYG	5	4	0.800000	PIPPYG
971		_20210819_045511.wav	_20210819_045526_000.wav		PLEAUR	20	9	0.450000	PIP
972		_20210819_045531.wav	_20210819_045531_000.wav		PLEAUR	12	7	0.583000	PIP
973		_20210819_045451.wav	_20210819_045506_000.wav		PLEAUR	9	6	0.667000	PIP
974		_20210819_045451.wav	_20210819_045451_000.wav		PLEAUR	14	6	0.429000	PIP
975		_20210819_050012.wav	_20210819_050027_000.wav		PLEAUR	5	4	0.800000	PIP
976		_20210819_045912.wav	_20210819_045912_000.wav		PLEAUR	5	3	0.600000	PIP
977		_20210819_050152.wav	_20210819_050152_000.wav		PLEAUR	3	2	0.667000	Noise