A Bat Assessment of St Mary's Priory, Old Greenhills Road, Tallaght, Dublin 24 Register Reference: SD22A/0035

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Summary

The bat activity on this site, recorded in an active survey in June 2022, was moderate to low and recordings of 3 bat species were made based on both the active and passive monitoring with a static monitor and two hand-held detectors. All bats were noted commuting through the site with a moderate level of feeding. No bats were seen entering or exiting the trees within the site or into the Priory, church or other neighbouring buildings, and no swarming behaviour was recorded at any stage within the site. There is not a wide variety of bat species in the immediate area and suitable feeding and roosting habitats. There is no evidence of bat roost loss from this proposal. There will be a moderate loss of foraging as there are a number of mature trees that will be removed. There are significant trees within the site with roost potential but with no bats noted in May 2022. There will be an increase in the lighting of the site given that it is currently unmanaged pasture surrounded by mature trees including poplars, horse chestnut, individual conifers, ash etc. There is some light pollution from surrounding security lights at the Priory and along the public road. Mitigation for this development includes roost provision in the proposed buildings by means of incorporation of purpose-built roost boxes, planting for biodiversity and lighting management.

Introduction

This assessment follows from the Additional Information Request from South Dublin County Council of Decision Order Number: 0429 Date of Decision: 04-Apr-2022, Register Reference: SD22A/0035, Registration Date: 07-Feb-2022 for lands within St Mary's Priory, Old Greenhills Road, Tallaght, Dublin 24. What is proposed is (a) Construction of a 4 storey nursing home building consisting of: (i) 106 bedrooms (with ensuite); (ii) associated residents welfare facilities; (iii) administration areas and staff facilities; (iv) multi-function space and pharmacy proposed at ground level; (b) construction of 60 one bed independent living units in 3 blocks as follows: (1) Block A, a 4 storey building comprising 11 one-bed units; (2) Block B, a part 4/part 5 storey building comprising 35 one-bed units; and (3) Block C, a 5 storey building comprising 14 one-bed

unit. Each unit will be provided with a private open space in the form of a balcony terrace (6sq.m.) (c) The development will include communal open space and landscaping (including new tree planting and tree retention), 30 car park spaces (including 3 limited mobility parking spaces; 3 EV parking and 1 car sharing spaces); and 52 bicycle parking spaces (d) The development will be served by a new pedestrian and vehicular access from Old Greenhills Road through existing boundary wall. Material from the removed wall will be repurposed within the landscape areas; and (e) The development includes landscaping, boundary treatments (including wells and railings to southern and western boundaries), and ESB Substation SuDs drainage, road infrastructure and all ancillary site works necessary to facilitate the development.

Under Point 8, the Council stated the following:

"The Ecological Assessment states that no bat survey has been conducted although mitigation measures are proposed. It is considered appropriate that the scheme is designed so as to minimise impact on bat activity and habitats (especially habitats).
(a) A bat survey should be undertaken to establish the presence of bats, the areas of the site used by bats and for what activities or roosting.
(b) Mitigation measures should be reflected in the scheme plans and if necessary, details should be provided to show that the scheme can be safely lit."
Bats are a widespread element of the Irish fauna. They are known to occur from much of the rural landscape and to a lesser extent, the urban environment and here they occupy buildings and occasionally trees for short or long periods. Houses and other buildings are a vital element of the annual cycle of all Irish bat species and at no time more so than the period May to August, but many bats may also avail of buildings as hibernation sites. In sites such as the proposed development site where there are no buildings, there is still the potential for roosting within trees or within nearby houses and feeding within the site proposed for development. Changes to a site including tree and hedge removal and loss of other vegetation may reduce the options available to bats as a roosting site, place bats at risk of injury or death and may also affect their feeding and commuting activity.
Bats are protected by Irish and EU law and to prevent unlawful injury or death, it is essential that a full understanding of the site is available in advance to protect the resident bats from unintentional harm and to create a pathway by which a legal derogation and exemption may be designed in consultation with the National Parks and Wildlife Service of the Department of Housing, Local Government and Heritage.

Development of the site at Greenhills Road, Tallaght will see the removal of some mature trees within the site and the removal of much of the vegetation. Trees are important for bats both for

feeding and commuting as well as as roost sites at various points in the year. This assessment will address the potential for bat roosting within the site and identify the potential for impacts upon bat feeding and commuting within the lands that form the proposed site of construction based upon a visual assessment of the lands and a walkover bat detector survey to determine the potential for roost sites within the building and trees on site based on bat emergence and return behaviour.

Surveying in June is a suitable period to look at bat activity and occupancy during the breeding season when females have established maternity roost sites (the largest roost type (in the Irish context)). These roosts are typically in close proximity to or within areas of good feeding. A bat detector assessment at this time can disclose the value of a site for feeding and how bats avail of a site in commuting to and from important sites including feeding sites and roosts.

Methodology

Survey dates 13th to 14th June 2022

Survey equipment

Echometer 3 x 2
Songmeter Mini Bat
Hand torches. Fibrescope. 2 x Android phones
Office analysis – HP Desktop PC, Kaleidoscope Pro sound analysis software.

The trees were examined for the presence of bats on 13th June 2022 and again on 14th June 2022. This involved an examination of the trees (from ground level), prior to sunset and a bat detector assessment of the lands and trees by two surveyors from prior to sunset for 1.5 hours and again prior to sunrise for 1 hour. Each surveyor walked around the site watching for the appearance of bats or for the pre-emergence behaviour associated with roosts of greater than one bat. This includes sampling of the atmospheric conditions and queueing to emerge, and bats may be noted squeaking loudly prior to emergence. Similarly, the pre-dawn evaluation sought return behaviour described as "swarming" during which bats may approach a roost entrance numerous times before returning to the roost site. This period is the best for determining roost exit points. Each surveyor noted the time and location of bat activity and the emergence or return of bats to any structure within or adjoining the site.

One Songmeter Mini Bat was placed close to the mature trees proposed for removal within the site. The two Echometer 3 monitors were held for the entirety of the active survey and covered the entire site during the active walkabout survey.

All bat signals were recorded to SD cards and analysed to identify the species present. Automatic identification was carried out by the software and all signals of interest were checked manually for veracity. A sample of unidentified signals were also manually checked to ensure correct identification of all species present.

Data from the Bat Conservation Ireland database was collated and from any previous surveys in the vicinity of the site. This assessment was undertaken with due consideration of the best practice guidance provided by NOWS - Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

Survey Constraints

There were no constraints to this assessment. Weather conditions were suitably warm (13 degrees Celsius and dryl) for the summer assessment and were suitable for bat activity throughout the survey period. Sunset was at 21.54 hours.

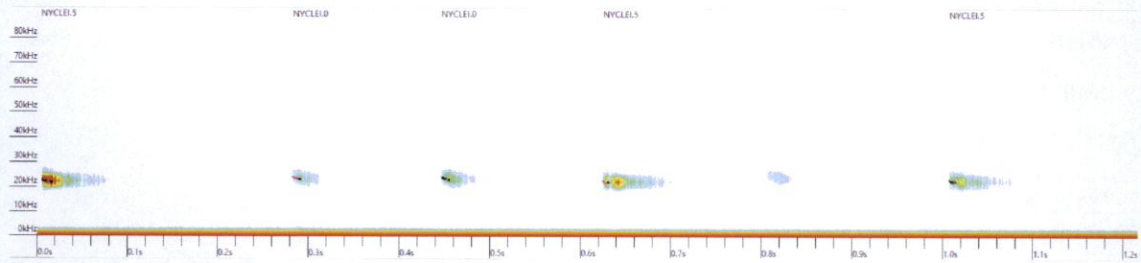
Existing Environment

Bat roosts within the site ***None***

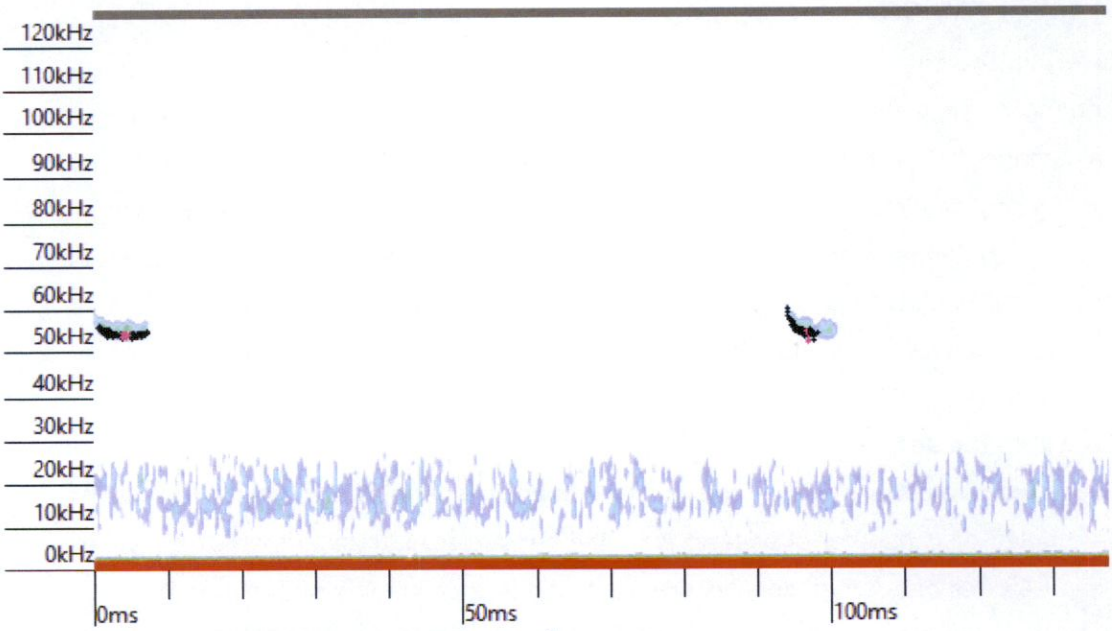
There are no roosts within the site. No bats emerged from or returned to any tree within the site. There are a number of tree roost opportunities for bats within the site. This includes very significant ash trees, a substantial horse chestnut tree, a second smaller horse chestnut and a weeping ash all with high roost potential. There is a lime tree with low roost potential. There are numerous buildings with roost potential surrounding the site. Trees within the eastern and south-eastern section of the site have low to nil roost potential but may act to reduce light pollution of the site.

Bat activity within the site

Bat activity was moderate to low within the site (see Appendices for a list of bat activity). Two bat species were noted on a number of occasions by the handheld bat detectors on site; common pipistrelle and Leisler's bat. A third species was recorded less commonly both during the active survey and by the static monitor; soprano pipistrelle. Bat activity was noted at 22.03 hours to the southern edge of the site (a common pipistrelle). Within the northern section, the first bat was a common pipistrelle at 22.09 hours and again at 22.15 hours. The next bat noted during the active survey in this area was a Leisler's bat at 22.33 hours. A Leisler's bat was noted by the static monitor at 22.30 hours. The last bats within the site were a common pipistrelle which headed down towards the Priory area at 04.29 hours and a passing Leisler's bat at 04.38 hours, recorded by the static monitor.



Leisler's bat within the site at 04.38 hours 14th June 2022



Soprano pipistrelle spectrogram at 04.03 hours 14th June 2022

A data trawl from Bat Conservation Ireland database and previous surveys by Wildlife Surveys Ireland revealed that a survey by Wildlife Surveys Ireland on the corner of Airton Road and Greenhills Road on May 14th 2019, provided evidence of common pipistrelle activity, a single soprano pipistrelle signal and sustained Leisler's bat activity. In surveys of the IT Tallaght site in 2016 and 2018, common pipistrelle activity was highest, soprano pipistrelle was negligible in September 2018 and low in May 2016. Leisler's bat activity was higher in September 2018 than in May 2016. It was estimated that the maximum bat numbers within the site during the active survey period was 6 individuals.

Bat Conservation Ireland data: search results June 2022		
Search parameters: Roosts Transects Ad-hoc observation sites with observations of all bats within 1000m of site		
Transects		
Name	Grid reference	Species
Newbridge Firhouse Transect; Spot 9	O1065527272	Myotis daubentonii; Myotis spp.;Unidentified bat

TRANSECT PASS MENU
View transect
View transect pass
Transect pass observations

Transect pass observations

Transect name Newbridge Firhouse Transect, Spot 9
Survey All Ireland Daubentons Bat Waterways Survey
Pass date 18 Aug 2007
Start time 21:30:00
Duration 1 hrs 30 mins
Bat observations

Recorder name	Species	Sampling method	Count	
Daubenton's Volunteer	Myotis daubentonii	Heterodyne bat detector	5	Remove
Daubenton's Volunteer	Unidentified bat	Heterodyne bat detector	4	Remove
Daubenton's Volunteer	Myotis spp.	Time-expansion bat detector		Remove

Bat Conservation Ireland records from within 1 km of the site

Proposed Development

Site location (top), site footprint and habitat map from the EclA (bottom left) and proposed site layout (bottom right) showing tree loss within the site

Potential Impacts

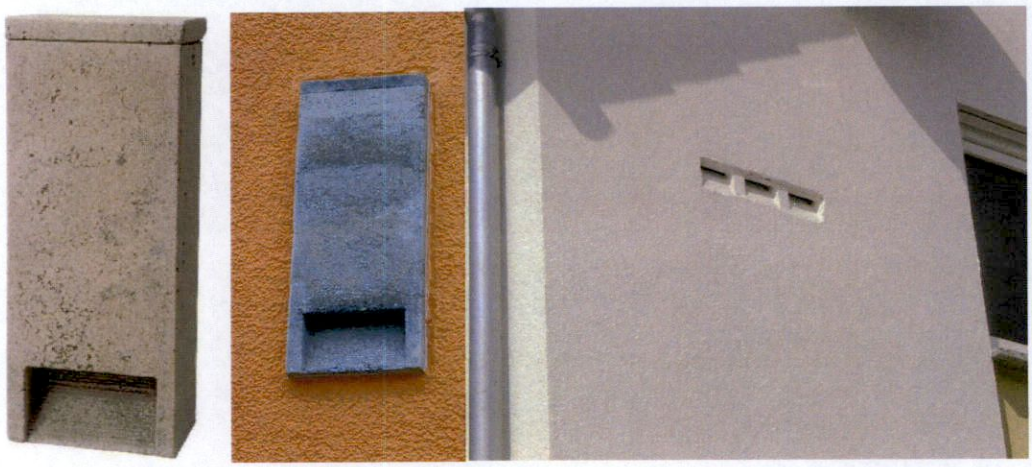
Mitigation

Tree felling shall be undertaken in the period September to November

To ensure that no breeding bats or hibernating bats are affected, tree felling shall be at a time of year when bats are fully mobile and capable of avoiding death or injury during felling. Alternatively, trees can be inspected for bats prior to felling by a suitably qualified ecologist with the aid of a fibrescope and with height access. To avoid nesting birds, the period March to end of August should be avoided unless there are no nesting birds present as confirmed by an ecologist.

Incorporation of bat boxes into the buildings or attachment to remaining trees

4 x 2FR Schwegler bat tubes or 4 x Ans-6-bat boxes shall be incorporated into the buildings to provide bat roost sites. These should be away from windows or balconies and the majority should face southerly to increase the likelihood of usage in summer.



2FR bat boxes (installed singly or in a group)

An alternative option is the use of 6 x 2F Schwegler bat boxes (3 with internal panels) attached to two mature retained trees with suitable access features for bats (free of clutter or dense branches and leaves and preferably with exposure to the sun for most of the day). Boxes must be above 2.5 metres but may be placed at any point above this.

Schwegler 2F bat box (left) and with double front panel (right)

Native shrubs and trees shall be used within the new development.

Where other climbers and shrubs are required, they should be taken from the approved list from the All-Ireland Pollinator Plan – All-Ireland-Pollinator-Plan-2021-2025-WEB.pdf (pollinators.ie). (https://pollinators.ie/wp-content/uploads/2021/03/All-IrelandPollinator-Plan-2021-2025-WEB.pdf)

Light spillage and light pollution shall be kept to a minimum with the use of cowls, caps, and low-level bollard lighting where possible.

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);

It is recommended that bollard lighting is employed where illumination is essential unless there is an equivalent means by which light overspill can be controlled. The source of light should be Light Emitting Diodes (LEDs) as this is a narrow beam highly directional highly energy efficient light source. The lighting should allow for a light level of 3 lux at ground level It is easier to control both the direction and light level of low lighting because it is closer to the target area than brighter light sources. Lighting should preferably respond to a trigger (motion sensor on approach of vehicles or pedestrians) and be capable of dimming.

- Lighting shall be directed downwards away from the treetops and known bat roosts.
- Tree crowns shall remain unilluminated
- All luminaires shall lack UV elements when manufactured and shall be LED

- A warm white spectrum (ideally <2700 Kelvin but as low as South Dublin County Council limitations allow) shall be adopted to reduce blue light component
- Luminaires shall feature peak wavelengths higher than 550 nm •
- Light levels shall be controlled by the use of sensor lighting for security.
- Lights must not be left on throughout the night.
- No floodlighting shall be used to avoid light spillage, to keep light below the horizontal.
- Hoods, louvres, shields or cowls should be fitted on the lights to reduce light spillage.
- Lights should be of low intensity and use several if required.
- Lights should be on a timer system / daylight sensors to switch off when not required.

Impacts After Mitigation

There is no impact upon bat conservation predicted from the proposed construction. The mitigation, if implemented in full, will reduce any impacts to a short-term to medium term slight loss of feeding. The measures proposed will prevent impacts from lighting and from vegetation loss and from any potential roost loss. The incorporation of bat boxes into the building will provide long-term bat roost sites.

APPENDICES

Appendix 1: Bat box mitigation

Schwegler 2 FR Bat tube

Dimensions:
Height 47.5cm
Width 20cm
Depth 12.5cm.
Entrance: Height 9cm
Width 15cm
Depth 2cm.
Weight: 9.8kg

Ans-6-bat box similar to the 1FR from Schwegler

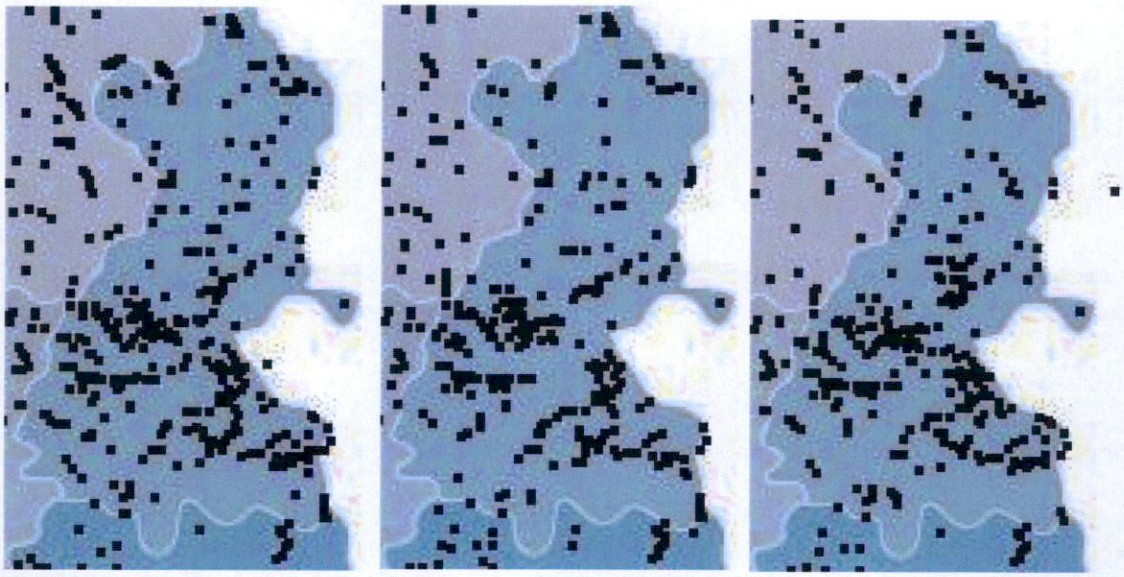
Dimensions:
Height: 46.8 cm
Width: 25.4 cm
Depth: 12.2 cm

Schwegler 2F

Dimensions:
Height: 33cm.
Outside diameter: Ø 16 cm.
Weight: about 3.8kg.

Appendix 2: Desktop Survey results

Bat Conservation Ireland Data



Distribution of Common pipistrelles (left), soprano pipistrelles (middle) and Leisler's bat in Dublin

Appendix 3

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. Due to the deep torpor into which bats enter, demolition and tree felling may have significant consequences where appropriate measures are not built into a project to prevent bat fatalities.

In winter bats move to old stonework, trees and caves to hibernate (in addition to a considerable proportion for which no hibernation site is known). 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 Bern Convention

Article 6 of the "Convention on the Conservation of European Wildlife and Natural Habitats' (Bern 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.

Bat activity within the site June 2022

Legend

Green paddle	Common pipistrelle
Blue paddle	Soprano pipistrelle
Yellow paddle	Leisler's bat
Purple line	Walked transect

Bat data from handheld EM3 Greenhills Road site June 13th to 14th 2022

Date	Time	Auto Id* * using Kaleidoscope Pro	Pulses	Matching	Manual ID
13/06/2022	22:03:51	Noid	12	0	Common Pipistrelle
13/06/2022	23:03:09	Leisler's Bat	16	16	Leisler's Bat
13/06/2022	23:08:35	Common Pipistrelle	4	4	Common Pipistrelle
13/06/2022	23:20:09	Soprano Pipistrelle	8	8	Soprano Pipistrelle
13/06/2022	23:22:02	Common Pipistrelle	11	11	Common Pipistrelle
13/06/2022	23:24:10	Noid	2	0	Common Pipistrelle
14/06/2022	04:05:41	Soprano Pipistrelle	19	19	Soprano Pipistrelle
14/06/2022	04:06:15	Soprano Pipistrelle	8	8	Soprano Pipistrelle
14/06/2022	04:07:35	Common Pipistrelle	14	13	Common Pipistrelle
14/06/2022	04:09:33	Common Pipistrelle	9	9	Common Pipistrelle
14/06/2022	04:22:52	Common Pipistrelle	2	2	Common Pipistrelle
14/06/2022	04:23:07	Noid	5	0	Common Pipistrelle
14/06/2022	04:24:29	Common Pipistrelle	13	13	Common Pipistrelle
14/06/2022	04:24:33	Common Pipistrelle	32	32	Common Pipistrelle
14/06/2022	04:24:39	Common Pipistrelle	33	33	Common Pipistrelle
14/06/2022	04:24:46	Common Pipistrelle	17	17	Common Pipistrelle
14/06/2022	04:24:51	Common Pipistrelle	34	34	Common Pipistrelle
14/06/2022	04:25:05	Common Pipistrelle	6	6	Common Pipistrelle
14/06/2022	04:25:10	Common Pipistrelle	9	9	Common Pipistrelle
14/06/2022	04:26:23	Common Pipistrelle	15	15	Common Pipistrelle
14/06/2022	04:26:34	Common Pipistrelle	43	43	Common Pipistrelle
14/06/2022	04:27:09	Common Pipistrelle	20	20	Common Pipistrelle
14/06/2022	04:27:13	Common Pipistrelle	9	9	Common Pipistrelle
14/06/2022	04:27:27	Common Pipistrelle	5	5	Common Pipistrelle
14/06/2022	04:27:30	Common Pipistrelle	3	3	Common Pipistrelle
14/06/2022	04:27:38	Common Pipistrelle	37	37	Common Pipistrelle
14/06/2022	04:27:47	Common Pipistrelle	41	41	Common Pipistrelle
14/06/2022	04:27:55	Common Pipistrelle	40	40	Common Pipistrelle
14/06/2022	04:28:03	Common Pipistrelle	3	3	Common Pipistrelle
14/06/2022	04:28:18	Common Pipistrelle	21	21	Common Pipistrelle
14/06/2022	04:28:28	Common Pipistrelle	7	7	Common Pipistrelle

Bat data from static monitor through the night of 13th June 2022

Date	Time	Auto Id*	Pulses	Matching	Manual ID
13/06/2022	22:30:18	Leisler's bat	5	5	Leisler's Bat
13/06/2022	22:45:24	Soprano pipistrelle	38	38	Common Pipistrelle
13/06/2022	22:52:56	Common pipistrelle	29	22	Common Pipistrelle
13/06/2022	23:01:32	Noid	20	0	Common Pipistrelle
13/06/2022	23:02:31	Leisler's bat	10	8	Leisler's Bat
13/06/2022	23:02:57	Leisler's bat	29	26	Leisler's Bat
13/06/2022	23:17:20	Soprano pipistrelle	14	14	Soprano Pipistrelle
13/06/2022	23:39:44	Leisler's bat	29	24	Leisler's Bat
14/06/2022	00:03:38	Leisler's bat	2	1	Leisler's Bat
14/06/2022	00:21:00	Common pipistrelle	67	60	Common Pipistrelle
14/06/2022	00:41:30	Common pipistrelle	103	90	Common Pipistrelle
14/06/2022	00:41:58	Common pipistrelle	100	93	Common Pipistrelle
14/06/2022	00:42:14	Common pipistrelle	15	15	Common Pipistrelle
14/06/2022	00:56:17	Noid	10	0	Soprano Pipistrelle
14/06/2022	01:05:43	Leisler's bat	3	3	Leisler's Bat
14/06/2022	01:08:18	Leisler's bat	3	3	Leisler's Bat
14/06/2022	01:30:30	Soprano pipistrelle	7	7	Soprano Pipistrelle
14/06/2022	01:35:35	Common pipistrelle	29	28	Common Pipistrelle
14/06/2022	02:35:42	Common pipistrelle	33	32	Common Pipistrelle
14/06/2022	02:52:30	Soprano pipistrelle	33	33	Soprano Pipistrelle
14/06/2022	02:59:08	Noid	4	0	Leisler's Bat
14/06/2022	03:01:45	Common pipistrelle	64	61	Common Pipistrelle
14/06/2022	03:05:15	Common pipistrelle	49	48	Common Pipistrelle
14/06/2022	03:13:06	Leisler's bat	5	5	Leisler's Bat
14/06/2022	03:19:11	Soprano pipistrelle	22	16	Soprano Pipistrelle
14/06/2022	03:21:08	Leisler's bat	29	26	Leisler's Bat
14/06/2022	03:49:12	Leisler's bat	5	4	Leisler's Bat
14/06/2022	03:58:08	Leisler's bat	3	3	Leisler's Bat
14/06/2022	04:02:39	Common pipistrelle	101	91	Common Pipistrelle
14/06/2022	04:02:55	Common pipistrelle	64	58	Common Pipistrelle
14/06/2022	04:03:16	Common pipistrelle	128	113	Common Pipistrelle
14/06/2022	04:03:32	Common pipistrelle	4	4	Common Pipistrelle
14/06/2022	04:03:38	Common pipistrelle	113	109	Common Pipistrelle
14/06/2022	04:03:53	Common pipistrelle	84	73	Common Pipistrelle
14/06/2022	04:04:08	Common pipistrelle	38	33	Common Pipistrelle
14/06/2022	04:04:31	Common pipistrelle	87	83	Common Pipistrelle
14/06/2022	04:04:47	Common pipistrelle	72	**70**	Common Pipistrelle
14/06/2022	04:05:11	Common pipistrelle	105	96	Common Pipistrelle
14/06/2022	04:05:26	Common pipistrelle	11	11	Common Pipistrelle
14/06/2022	04:05:36	Common pipistrelle	86	78	Common Pipistrelle
14/06/2022	04:06:07	Common pipistrelle	84	76	Common Pipistrelle
14/06/2022	04:06:25	Common pipistrelle	82	76	Common Pipistrelle
14/06/2022	04:06:43	Common pipistrelle	13	13	Common Pipistrelle

14/06/2022	04:07:05	Common pipistrelle	20	13	Common Pipistrelle
14/06/2022	04:22:39	Noid	8	0	Common Pipistrelle Leisler's Bat
14/06/2022	04:23:58	Common pipistrelle	29	28	Common Pipistrelle
14/06/2022	04:38:42	Leisler's bat	22	22	Leisler's Bat

Trees examined for roosting bats

Trees examined for roosting bats and lighting in areas (IT Tallaght) adjoining the site (bottom right)