

To: An Coimisiún Pleanála

Planning Reference: 324161 - An Coimisiún Pleanála – Case reference: PAX19.324161

Re: Proposed development of 15 no. wind turbines, a permanent 220kV on-site substation, and associated infrastructure

Date: 26-May-2026

Proposed Development (Summary): Proposed development of 15 no. wind turbines, a permanent 220 kV substation and all associated infrastructure – RED III application.

Site Location: Townlands of Cooldorrageh, Kilnagarnagh, Cappanalosset, Tumbeagh, Killaghintoher, Castlearmstrong, Leabeg, Cornafurish and Corrabeg, Lemanaghan, Kilnagoolny, Straduff, Lisdermot, Derrica More, Rosfaraghan, Rashinagh, Cor Mor and Cor Beg, Corbane, and Ballindown Co. Offaly



"ESTO FIDELIS"

Offaly Bat Group was established in March 2025 under guidance from Bat Conservation Ireland and under specific guidance from Anna Collins from Kildare bat group and are a registered member of bat conservation Ireland. We have been actively involved in 2 woodland surveys in Offaly last year and many bat walks and talks and are seriously concerned with the effects on the bat population of Offaly based on the growing amount of wind turbines in the County.

Offaly bat group will reference Offaly County Council objections to the proposed windfarm with documented facts

- Co. Offaly currently has 520MW of operational wind energy developments.
 - This has been delivered over a short period of time in the context of such developments nationally, i.e. the first windfarm was energised in 2014.
 - 300MW alone has been energised since 2024.
 - A further 85MW is permitted and awaiting construction imminently.
 - A further 247MW is currently in the planning system (including the current application) - all SID applications to the Commission.
 - Combined, the above (inclusive of the requirements to omit a large portion of the turbines within the current application) represents 9% of the entire country's Climate Action Plan / National Planning Framework 2030 wind energy target of 9,000MW.
 - Co. Offaly represents 2.3% of the country's landmass.
 - An additional c.266MW is in the public domain at the pre-planning stage.
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- Therefore, the total 'pipeline' of wind energy development within Co. Offaly would represent 11% of entire country's Climate Action Plan / National Planning Framework 2030 wind energy target.
 - Please note a number of applications or pending applications for further wind development located outside the Wind Development Areas in the County Development Plan are not included in these figures.
 - Please also note that a significant portion of adjoining Counties' wind energy 'pipelines' (Offaly has 7 neighbouring counties) are located contiguous or close to the Offaly county boundary, with at least five projects crossing / sharing the county boundary. None of the turbines located in the adjacent counties are counted in the above.

Ref p2, p3 Offaly OCC lodged observations

Wind turbines can affect bats in several important ways, and this has become a growing conservation issue in Ireland as wind energy expands. The main impacts are direct mortality from collisions, barotrauma (internal injuries caused by pressure changes near blades), and habitat disturbance or displacement.

Bat species in Ireland

Ireland has nine resident bat species, all of which are legally protected under Irish and EU law. Common Irish species include the soprano pipistrelle, common pipistrelle, Leisler's bat, Daubenton's bat, and the lesser horseshoe bat.

Main effects of wind turbines on bats

1. Collision mortality

Bats can be struck directly by rotating turbine blades. Research internationally shows that wind farms can kill substantial numbers of bats annually, especially migratory and tree-roosting species.

In Ireland, concern is particularly strong for:

- Leisler's bat (Ireland has an internationally important population)

- Nathusius' pipistrelle (a migratory species occasionally recorded in Ireland)
- Lesser horseshoe bats in western regions

Studies show bat activity around turbines often peaks during:

- warm nights,
- low wind speeds,
- late summer and autumn migration periods.

2. Barotrauma

Bats may die even without direct impact. Rapid air-pressure changes near moving blades can damage lungs and internal organs. This phenomenon is called barotrauma. It has been documented at wind facilities globally and is considered a significant source of bat mortality.

3. Habitat loss and behavioural disturbance

Wind farm construction can alter habitats through:

- road construction,
- lighting,
- turbine noise,
- fragmentation of commuting routes.

By its own admission Ref:

"Wind energy development can impact wildlife, directly through mortality and indirectly through disturbance and habitat loss. Bat fatalities have been reported at wind energy facilities around the world, raising concern about the cumulative impacts of such developments on bat populations (Arnett et al. 2016)"

Observation 1

Offaly has done enough to meet energy targets for their size and population. and Offaly bat group insist that enough bats have been victim to decreased population due to wind turbine development in the County.

Observation 2

With reference to the below table from Appendix 6-1- bat survey report it states that emergence surveys began 30 minutes before sunset and concluded within 1.5 hours after sunset. Offaly bat group would like to make an observation that this is not accurate as:

On April the 18th sunset was 20.32 and the survey was started at 20.20 which was 12 minutes before sunset and ended at 21.50 which was 1 hr and 22 mins. A transect of 4.8 Km was covered in 1 and half hours. As referenced below a 4.75 Km transect would require at least 3 to 4 hours.

On 7th August 2024 Sunset was officially 21:11 from meteorological records and the survey started at 21:14 and on this survey both emergence and walked transit was completed within a 2-hour window covering both emergence and walked (8.4KM) which was double the distance of the previous survey. It is very questionable that both an emergence and a 5 mile + walked transect was completed in a 2-hour time frame given the darkness on health and safety grounds that the 2 people split up and did separately.

Offaly bat group have done several woodland bat surveys last year and on health and safety grounds would never split up given the conditions noted during the walk of the moon not visible and 100% cloud cover.

The third survey on 3rd October noted below was completed in 3 hours both a driven (6.25 Km) and a transect (4.75 Km). Offaly Bat Group would say this is impossible to do in such a short time period accurately and was completed in October outside the recommended peak time for activity.

*Walking a 4.75 km bat transect requires **3 to 4 hours** of direct field time in a single night. This allows a surveyor to walk the route slowly at roughly 1.5 km/h while actively using a bat detector to stop, listen, and record bat passes. (Ref: Inis Ecology + MKOireland.ie)*

Planning a full ecological assessment involves additional time:

- **Fieldwork constraints:** Activity surveys can only be conducted during the active season (typically **May to September**) and in dry, mild weather with wind speeds under 19 km/h. (Bat conservation Ireland)
- **Setup and timing:** You must start your survey at official sunset and continue for at least 2 hours, as this is when the majority of bats emerge to forage.
- **Repeated visits:** Best practice guidelines (such as those from Bat Conservation Ireland or CIEEM) often require these transects to be repeated multiple times across the spring and summer months to gather comprehensive data.

It is the opinion of Offaly bat group that of the 3 bat surveys conducted below only one was completed in the recommended window of May to August when bats are most active hunting insects and raising their young (BCI) and were not repeated multiple times within this time frame to give an accurate representation for this planning application.

Table 3.3 Survey Effort - Mammal Activity Surveys (2024)

Date	Surveyors	Sunset	Type	Start-End	Weather	(km)
18 th April 2024	Kate Greaney and Fred Mosley	20:35	Dusk Emergence	20:20 - 21:50	13°C, Dry, Calm, Moon not visible, 95-100% cloud cover.	n/a
18 th April 2024	Kate Greaney and Fred Mosley		Walked Transect	21:50 - 23:20	10-11°C, Dry, Calm - light breeze, Moon not visible to partially visible, 80-95% Cloud cover.	4.8
7 th August 2024	Kate Greaney and Fred Mosley	21:14	Emergence and Walked Transect	21:14 - 23:14	16-17°C, Dry - light drizzle, Light breeze, Moon not visible, 100% Cloud cover.	8.4
3 rd October 2024	Nathan Finn and Fred Mosley	19:01	Walked and Driven Transect	19:01 - 22:01	12-14°C, Dry - drizzle, Light breeze, Moon not visible, 60-95% Cloud.	11 (6.25 driven and 4.75 walked)
Total Survey Effort 2024						24.2

3.3.3.1 Presence/Absence Surveys

Dusk emergence surveys were undertaken on the evenings of 18th April 2024 and 7th August 2024. Emergence surveys commenced 30 minutes before sunset and concluded within 1.5 hours after sunset.

Three structures were identified, two of which were identified as having potential for roosting bats and were subject to a presence/absence survey following the initial roost assessment.

Observation 3

3.4.1 Assessment of Bat Activity Levels

The online database tool Ecobat (mamunal.org.uk) is recommended by NatureScot 2021 to assess bat activity levels within a proposed wind farm development. This web-based interface, launched in August 2016, allows users to upload activity data and to contrast results with a comparable reference range, allowing objective interpretation. Uploaded data then contributes to the overall dataset to provide increasingly robust outputs. Ecobat generates a percentile rank for each night of activity and provides a numerical way of interpreting levels of bat activity in order to provide objective and consistent assessments. Table 3-6 defines bat activity levels as they relate to Ecobat percentile values (NatureScot, 2021).

Table 3-6 Ecobat Percentile Score and Categorized Level of Activity (NatureScot, 2021)

Ecobat Percentile	Bat Activity Level
81 to 100	High
61 to 80	Moderate to High
41 to 60	Moderate
21 to 40	Low to Moderate
0 to 20	Low

Ecobat was unavailable for a cross-site analysis of 2024 data as the platform has been undergoing maintenance since late 2022 with no proposed timeline of a relaunch. Ecobat has since relaunched at the end of 2024 after data evaluation had been undertaken, it was decided not to use the software for the site and rely on the site-specific analysis already undertaken.

With reference to the above the assessment of bat activity levels Ecobat database tool was not used even though it was available, this Offaly bat group would like to see utilised as it was available for the purpose of this assessment.

Offaly bat group note the scores related to each turbine and are concerned with the numbers considered moderate and high.

Table 3-1 Assessment of Activity Levels per Species, per Season, per Turbine Location Low, Moderate, High, Absent

Species	Season	Bat activity (ppch)	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D12
Myotis spp.	Spring	Median	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
		Maximum	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.7	0.2	0.3	0.4
	Summer	Median	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.1	0.5	0.1	0.4
		Maximum	0.4	0.5	0.4	0.4	0.7	0.5	0.4	1.4	0.9	1.2	0.5	2.0
	Autumn	Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
		Maximum	0.1	0.3	0.2	0.2	0.8	0.2	0.3	0.7	0.2	0.3	0.1	0.3
Lesser's bat	Spring	Median	1.7	0.7	1.2	1.7	1.3	0.8	1.6	1.5	2.7	3.8	4.0	4.7
		Maximum	3.9	1.6	4.0	6.0	3.8	2.1	6.1	7.0	6.0	10.7	10.1	8.8
	Summer	Median	0.9	0.8	1.0	0.4	0.6	1.2	0.2	1.5	2.2	0.7	1.0	0.6
		Maximum	18.1	3.9	8.8	1.4	4.1	7.5	2.1	6.1	6.7	3.4	5.4	3.8
	Autumn	Median	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
		Maximum	0.2	0.8	0.4	0.2	0.4	0.4	0.5	0.2	0.5	0.4	0.6	0.3
Nathusius pipistrellus	Spring	Median						0.0	0.0					
		Maximum						0.1	0.1					
	Summer	Median	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
		Maximum	0.9	0.4	0.1	0.1	0.3			0.1	0.6	0.1	0.1	
	Autumn	Median		0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0
		Maximum		0.6	0.1		0.1	0.2	0.1		0.1	0.1	0.1	0.1
Common pipistrellus	Spring	Median	2.7	2.1	2.2	2.7	2.7	1.1	8.5	1.5	1.8	4.6	2.5	11.0
		Maximum	13.1	17.1	10.9	11.7	13.1	6.9	17.9	16.2	10.3	19.2	8.1	16.1
	Summer	Median	3.7	4.2	2.5	8.6	2.9	1.5	2.5	8.2	6.8	3.1	2.1	10.1
		Maximum	19.8	17.1	11.1	19.1	17.3	12.9	21.8	21.4	22.1	19.8	22.6	10.3
	Autumn	Median	0.7	0.4	0.1	0.2	0.1	0.1	0.2	0.3	0.7	0.2	0.2	0.7
		Maximum	2.3	1.5	1.9	3.0	12.1	3.6	6.8	7.3	12.7	11.3	2.1	11.3
Soprano pipistrellus	Spring	Median	1.0	0.4	0.4	1.2	0.6	0.4	2.0	0.8	0.8	1.1	0.7	2.4

Brown long-eared bat	Summer	Maximum	5.5	1.2	1.9	5.1	3.8	3.1	15.9	2.5	1.8	7.5	2.2	6.8	
		Median	1.9	1.1	1.1	1.7	0.8	1.4	1.6	3.3	0.9	2.0	1.2	11.1	
	Autumn	Maximum	11.4	6.0	3.4	6.1	4.7	5.3	12.9	7.7	4.1	8.9	5.3	18.7	
		Median	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.6	
	Spring	Maximum	0.4	1.0	0.8	2.2	0.3	1.6	1.5	1.8	0.4	1.2	2.0	6.4	
		Median	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
	Summer	Maximum	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.4	0.1	0.1	0.1	
		Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
	Autumn	Maximum	0.3	0.5	0.5	0.6	0.5	0.5	0.1	0.3	0.6	1.1	0.2	1.1	
		Median	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
			Maximum	0.1	0.3	0.4	0.2	0.4	0.4	0.1	1.0	0.3	0.5	0.2	0.2

The table above has a significant number of moderate and high results which are deemed significant by Offaly bat group.

Observation 4

Additional Projects in the wider landscape is not representative of what is happening in Offaly and the nearby development in Cloghan, Co Offaly. See observation 1.

4.2.6 Additional Projects in the Wider Landscape

Table 4-3 provides an overview of wind farms in the vicinity of the Proposed Wind Farm. An assessment of large-scale non wind farm projects can be found in Section 6.5.2 Chapter 6.

Table 4-3 Additional Projects within 10km of the Proposed Project Site

Wind Farm Name and Location	No. Turbines	Status	Turbine Height
Within 10km of Proposed Project			
Lea Mor Turbine	1	Permitted	149m
Leabeg Wind Farm	2	Existing	126m
Bellaire Wind Farm	N/A	Proposed	N/A

Observation 5

The turbine delivery route described below makes assumptions as to the suitability for commuting and foraging bats and negligible roosting potential due to the lack of suitable roosting features. There are no surveys conducted to back this up or any reference noted to back this claim. It is the consensus of Offaly bat group that surveys should be conducted to back this assumption up.

Turbine Delivery Route

The proposed turbine delivery route for the Proposed Project will require a temporary access road for the facilitation of abnormal load deliveries at Kennedy's Cross, located in the townland of Ballindown, Co. Offaly. These works will comprise the re-establishment of a temporary junction bypass road to facilitate the delivery of turbine components and other abnormal loads. The proposed temporary road will measure approximately 160 metres in length and have a 6-metre running width.

The track to be used for re-establishment of the temporary junction bypass road comprises an existing grassed over track categorised as recolonising bare ground (ED3) transitioning to a grassland.

The habitat within the area is comprised of scrub (WS1) with a drainage channel (FW4) passing through. There is a hawthorn hedge and ash tree on the boundary of the proposed temporary road. The habitat adjacent to the track comprises scrub (WS1). A drainage channel (FW4) is adjacent to the existing track and is culverted beneath the N62 and N52 national roads. This channel had a low flow and was densely overgrown. The existing track to be reinstated for the delivery of turbine components was assessed and provides *Negligible* to *Low* suitability for commuting and foraging bats and has *Negligible* roosting potential. The scrub habitat adjacent to the area for proposed accommodation works provide *Low* to *Moderate* suitability for commuting and foraging bats and *Negligible* roosting potential due to the lack of suitable potential roosting features.

Observation 6

There was a bat roost observed in table 4.4 and not referenced to turbine location. Any roost in the vicinity is considered substantial in Offaly bat group opinion and should be protected. This should be referenced to turbine location.

Identified within the Proposed Wind Farm.

4.4 Manual Activity Surveys

4.4.1 Presence/Absence Surveys

Following the initial roost suitability assessments detailed in Section 4.3.2, dusk emergence surveys were carried out on the structures in April and August 2024. The results are summarised in Table 4-4 below. Structures assessed as having *Negligible* roosting potential, as detailed in Section 4.3.2, were not subject to further survey.

Five bats were observed emerging from the stone house in April 2024. These included 4 no. soprano pipistrelle and 1 no. suspected brown long-eared bat.

Observation 7

Transect surveys record 5 species

4.4.2 Transect Surveys

Manual bat activity surveys took place in the Spring, Summer, and Autumn of 2024. Bat activity was recorded on all surveys, with a total of 213 bat passes (Plate 4-8). Common pipistrelle (n=156) was the species recorded most frequently, followed by soprano pipistrelle (n=44), Leisler's bat (n=9), and Brown long-eared bat (n=3) and *Myotis* spp. (n=1) were recorded in low numbers.. Results of each transect survey are detailed in Table 4-4.

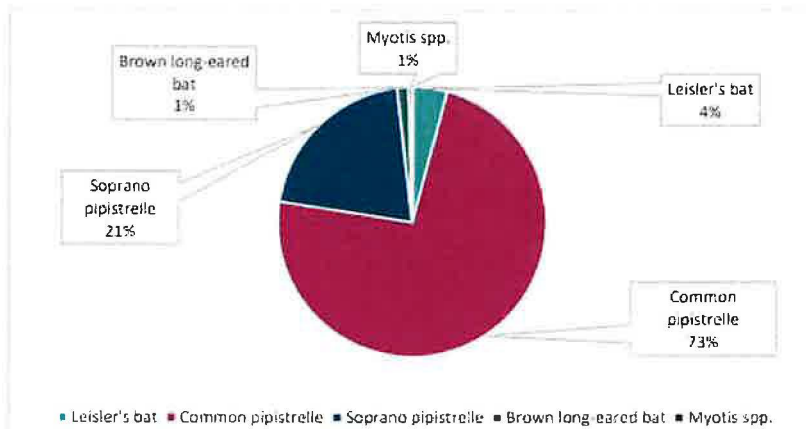


Plate 4-8 Species composition recorded during manual activity surveys

While Table 4.4 refers to 4 species which is correct?

Table 4-4 Manual Transect Results per Survey

	Spring	Summer	Autumn	Total
Leisler's bat	1	0	0	1
Common pipistrelle	42	0	56	98
Soprano pipistrelle	68	1	70	139
Brown long-eared bat	0	2	1	3
Total	111	3	127	241

Table 4.9 Seasonal bat transactional activity is questionable with summer activity not matching or comprehensible to table 4.4. Summer is considered June, July and August and only one survey was completed in August and Offaly bat group considers this compounds our observations made in observation 2.

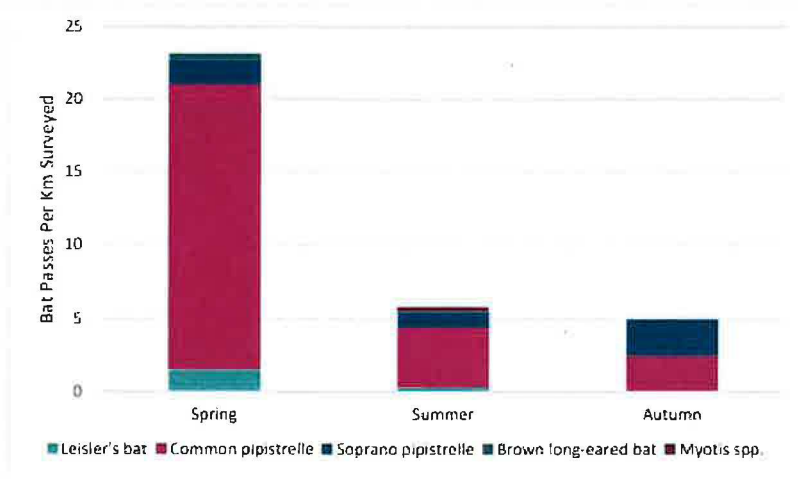


Plate 19. Manual Surveys 2021. Bat activity per seasonal survey

Observation 8

Leisler's bat species made up 13.1% of the ground level static surveys in 2024 with 8,829 recorded. Offaly bat group considers this significant as the presence of these bats are important as they are considered a higher turbine collision risk and the likelihood of this proposed development would have a detrimental effect on this bat species.

Relative Abundance	Low Collision Risk	Medium Collision Risk	High Collision Risk
Common species			Common pipistrelle Soprano pipistrelle
Rarer species	Darlington's bat Brown long-eared bat Lesser horseshoe bat		Leisler's bat
Rarest species	Natterer's bat Whiskered bat		Endangered pipistrelle
	Low Population Vulnerability	Medium Population Vulnerability	High Population Vulnerability

Plate 22 Population Vulnerability of Irish Bat Species (Adapted from NatureScot, 2021)

Table 4-5 Static Detector Surveys: Species Composition Across All Deployments (Total Bat Passes Per Hour, Per Season)

	2024			
	Spring	Summer	Autumn	Autumn Re-deployment
Total survey hours (all detectors)	139.6	290	963.7	162.2
<i>Myotis</i> spp.	0.9	2.2	0.5	<0.1
Leisler's bat	30.9	18.5	11.2	<0.1
<i>Nathusius' pipistrelle</i>	<0.1	<0.1	0.1	0.0
Common pipistrelle	84.2	123.4	3.6	0.8
Soprano pipistrelle	18.4	37.9	0.7	0.2
Brown long-eared bat	0.5	1.1	0.7	<0.1

Observation 9

The ground level static surveys contradicts the manual transect surveys with high activity noted during the summer period. This nullifies any manual surveys conducted for this application in Offaly bat group's opinion.

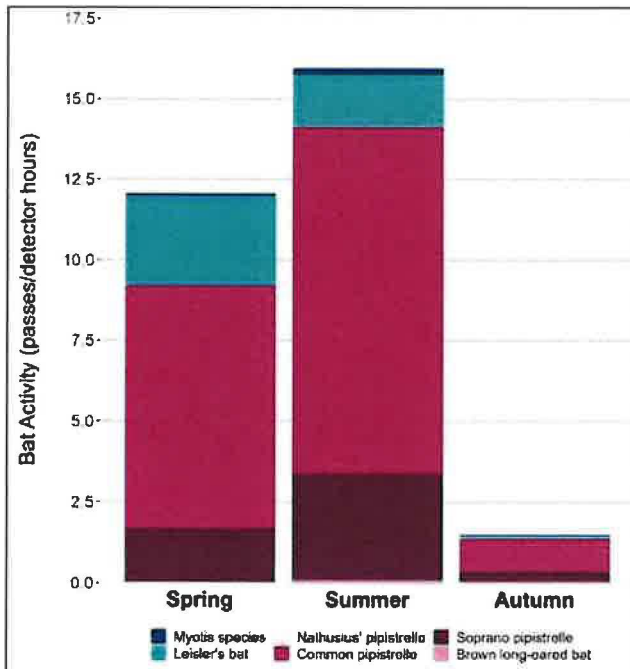


Plate 4-11 Bat Activity in Each Season During 2024 Ground-Level Static Surveys

Observation 10



Table 16 Total bat passes per season per detector 2021

Static detectors	D01 (T01)	D02 (T03)	D03 (T07)	D04 (T12)	D05 (T04)	D06 (T06)	D07 (T05)	D08 (T09)	D09 (T10)	D10 (T11)	D11 (T15)	D12 (T14)
Spring												
<i>Myotis spp.</i>	10	0	8	13	16	10	8	8	16	17	12	14
Leisler's bat	254	21	194	377	251	127	273	340	405	870	588	613
Nathusius' pipistrelle	0	0	0	0	0	2	2	0	0	0	0	0
Common pipistrelle	507	169	428	929	983	267	2589	438	507	1702	359	2888
Soprano pipistrelle	430	371	260	546	298	367	838	496	303	596	364	3895
Brown long-eared bat	10	0	8	3	5	8	5	4	3	18	1	3
Summer												
<i>Myotis spp.</i>	13	22	19	9	54	29	18	35	49	110	27	114
Leisler's bat	452	274	418	174	253	428	118	321	652	656	281	233
Nathusius' pipistrelle	9	4	3	3	2	0	0	1	5	2	1	0
Common pipistrelle	1441	1067	741	3010	904	529	1403	1355	1667	3050	861	12145
Soprano pipistrelle	174	16	65	261	150	113	504	144	108	254	120	664
Brown long-eared bat	15	22	20	16	24	13	5	10	29	55	6	37
Autumn												
<i>Myotis spp.</i>	2	11	8	17	38	8	12	36	18	29	3	13
Leisler's bat	5	41	34	9	27	16	19	10	19	18	32	26
Nathusius' pipistrelle	0	16	2	0	3	3	2	0	2	1	2	6
Common pipistrelle	127	291	128	187	207	213	300	508	805	434	322	689
Soprano pipistrelle	23	32	43	133	18	97	94	152	51	94	105	173
Brown long-eared bat	1	24	28	21	31	21	10	35	17	44	16	10

Offaly bat group would consider the outlined-on page 30 of Appendix 6-1 -bat survey as a significant activity area for bats according to *Table 16: Total bat passes per season per detector 2021* and would be opposed to wind turbines in this area given the high recorded bats in the area.

This the assessment concludes itself below

Leisler's bat

Leisler's bat exhibited mostly *Moderate* median activity in spring with *Low* overall median activity in summer and autumn. The highest median activity was observed at D12 (T14) during spring, reaching 4.7 bat passes per hour (bpph), classified as *High*. This was the only *High* median activity recorded for the species across all detectors in 2024. Median rates declined to *Low* at all locations in autumn. Summer median rates were predominantly *Low* with D08 (T09) and D09 (T10) reaching *Moderate* median levels.

Observation 11

5.2 Importance of Bat Population Recorded at the Proposed Wind Farm

Ecological evaluation within this section follows a methodology that is set out in Chapter three of the 'Guidelines for Assessment of Ecological Impacts of National Roads Schemes' (NRA, 2009).

All bat species in Ireland are protected under international and national legislation, including the Bonn Convention (1992), Bern Convention (1982), and the EU Habitats Directive (92/43/EEC). In Ireland, they are also protected under the Wildlife Acts 1976 (as amended) and the European Communities (Birds and Natural Habitats) Regulations 2011.

Bats have been assessed as Ecological Receptors of **Local Importance (Higher Value)** based on the presence of a regularly occurring bat population recorded within the Proposed Wind Farm, including a confirmed roost and use of the site for foraging and commuting.

Observation 12

6.1.1 Assessment of Site-Risk

The likely impact of a proposed wind farm on bats is related to site-based risk factors, including habitat and development features. The site risk assessment, as per Table 3a of the NatureScot guidance, is provided in Table 6-1 below.

Table 6-1 Site-risk Level Determination for the Proposed Wind Farm (Adapted from NatureScot 2021)

Criteria	Site-specific Evaluation	Site Assessment
Habitat Risk	<p>One low-value roost (≤10 specimens) containing soprano pipistrelle, was identified within the Proposed Wind Farm.</p> <p>The habitats within the site provide potential suitable commuting and foraging habitat for bats and is connected to the wider landscape by linear features such as bog woodland edge, tracks, drains and scrub. However, it does not provide an extensive and diverse habitat mosaic of high quality or meet the criteria of a high-risk site as set out in Table 3a of NatureScot, 2021.</p>	Moderate
Project Size	<p>Following the criteria set out in NatureScot, 2021 the Proposed Project is of medium scale as it consists of 15 no. turbines. Whilst those turbines are over 100m in height, it is well below the number of turbines that would constitute a large development (NatureScot, 2021).</p> <p>Some other wind energy developments within 10km.</p> <p>The Proposed Project is a Strategic Infrastructure Development.</p> <p>Comprising 15 no. turbines >100 m in height.</p>	Medium
Site Risk Assessment (from criteria in Plate 3.5)		Medium Site Risk (3)

The assessment is completely irrelevant as it is referencing a turbine height of >100m the turbines proposed are of height 220 m which makes the reference totally irrelevant and per scale not relatable to any referenced data by Offaly bat groups opinion.

According to their own admissions bats have been assessed as ecological receptors of local importance of higher value based on the presence of regularly occurring bat population recorded within the proposed wind farm, including a confirmed roost and use of the site for foraging and commuting. This alone should be enough to determine the site as not suitable for a wind farm.

Observation 13

6.12.11 Leisler's bat

The Proposed Wind Farm is within the current range of the Leisler's bat (NPWS, 2019). Leisler's bats are classed as a rarer species of a high population vulnerability which have a high collision risk (Plate 3-2). Leisler's bats were recorded during all activity surveys across the Proposed Wind Farm. When assessed in the context of the identified site risk and in line with Table 3b (NatureScot, 2021), overall activity risk for Leisler's bat was found to be **Medium** in spring and **Low** in summer and autumn, at typical activity levels. Peak risk assessment was **Medium** at peak activity levels in spring, **High** in summer and **Low** in autumn (See Table 6-2 below).

Based on site visit and survey data, including walked transects, it is determined that the Typical Activity (i.e. Median) is reflective of the nature of the Proposed Wind Farm, which is primarily bare cut away peat with low levels of bat activity recorded during the walked transects undertaken at the Proposed Wind Farm.

Thus, the overall collision risk level for the local population of Leisler's bat is generally assessed as **Low** to **Medium**.

Offaly bat group do not agree with this assessment as according to observation 7 manual transects table 4.4 would skew this data. Leisler bats account for 13.1% of the ground level static surveys in 2024 with 8,829 recorded.

Observation 14

Given the number of existing wind turbines in construction at present and operational monitoring that would be observed in current turbine locations in Ireland there should be data available from corpse searching from other wind farms currently operating. This should be made available to view statistics.

7.2.1 Operational Monitoring

To assess the effects of the Proposed Project on bat activity, 3 years of post-construction monitoring is proposed. Post-construction monitoring will include static detector surveys, walked survey transects and corpse searching to record any bat fatalities resulting from collision.

The results of post-construction monitoring shall be utilised to assess any potential changes in bat activity patterns and to monitor the implementation of the mitigation strategy as outlined in Section 7 above. If the monitoring identifies a curtailment requirement (i.e. significant bat fatalities encountered), a curtailment programme, in line with relevant guidelines, will be devised around key activity periods and weather parameters, as well as a potential increase in buffers.

Observation 15

Post monitoring irrelevant

Survey quotes

- > Windspeed in m/s (measured at nacelle height)
- > Temperature (°C)
- > Precipitation (mm/hr)

Accurate figures not available in pre planning observations as shown below

Table 3.3 Survey Effort - Manual Activity Surveys (2024)

Date	Surveyors	Sunset	Type	Start-End	Weather	(km)
18 th April 2024	Kate Greaney and Fred Mosley	20:35	Dusk Emergence	20:20 - 21:50	13°C, Dry, Calm, Moon not visible, 95-100% cloud cover.	n/a
18 th April 2024	Kate Greaney and Fred Mosley		Walked Transect	21:50 - 23:20	10-11°C, Dry, Calm - light breeze, Moon not visible to partially visible, 80-95% Cloud cover.	4.8
7 th August 2024	Kate Greaney and Fred Mosley	21:14	Emergence and Walked Transect	21:14 - 23:14	16-17°C, Dry - light drizzle, Light breeze, Moon not visible, 100% Cloud cover.	8.4
3 rd October 2024	Nathan Finn and Fred Mosley	19:01	Walked and Driven Transect	19:01 - 22:01	12-14°C, Dry - drizzle, Light breeze, Moon not visible, 60-95% Cloud.	11 (6.25 driven and 4.75 walked)
Total Survey Effort 2024						24.2

Offaly bat group not convinced of post monitoring of our bat species.

Observation 16

To quote below, this is unacceptable to Offaly bat group as this is based and referenced to no data considering the scale of the proposed wind farm at 220 m height.

7.3 Residual Effects

No Significant Effect

Taking into consideration the sensitive design of the project, the proposed best practice and adaptive mitigation measures; significant residual effects on bats with regard to 1) Collision mortality, barotrauma and other injuries, 2) Loss or damage to commuting and foraging habitat, 3) Loss of, or damage to, roosts and 4) Displacement of individuals or populations are not anticipated.

Observation 17

Offaly bat group has considered a survey conducted by An Doire environmental for Lemanaghan residents ref Lemanaghan bog bat survey attached.

This concluded

2.2 Results

The results of the bat surveys as follows

- The survey confirmed the presence of bats utilising the site. 3 species of bat were recorded utilising the area within 50m of the house.
- No species of bats were detected by the Batlogger detectors emerging from the house.
- Three species of bat , Brown long eared bat (*Plecotus auratus*), Leisler's bat (*Nyctalus leisleri*) along with Soprano pipistrelle (*Pipistrellus pygmaeus*) were monitored utilising the site around the cottage, particularly to the west of the structure.
- Common Pipistrelle (*Pipistrellus pipistrellus*) was the most common bat species surveyed.
- No bat species were observed or monitored utilising the house.
- Two species of *Myotis* bats were recorded that had not been logged on Biodiversity Ireland previously; these were Natterer's Bat (*Myotis nattereri*) and Whiskered bat (*Myotis mystacinus*)
- In total 7 bat species were monitored around the site, these species were commuting or foraging largely with no individuals recorded emerging from the structures on site. The presence of 7 out of the 9 species of bat resident on the Island is significant.



<i>Plecotus auritus</i>	3	6
<i>Myotis daubenton</i>	3	26
<i>Nyctalus leisleri</i>	4	27
<i>Myotis mystacinus</i>	7	94
<i>Myotis nattereri</i>	9	70
<i>Pipistrellus pygma</i>	10	128

<i>Pipistrellus pipistrellus</i>	30	308
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And concluded

4. Conclusion

The maintenance of the commuting and foraging corridors and provision of an appropriate buffer around these linear features should maintain the overall connectivity within the wider landscape.

The surveys have shown the active use of the site and its landscape features that bound this site for foraging and commuting; the mature and dying trees may also support roosting bats at different times of the year. The presence of the three *Myotis* species on the survey are of note as two of these species were not previously recorded. There is good bat habitat around the peatlands.

Offaly bat group consider this significant more so than the surveys conducted by Bord Na Mona.

Observation 18

- Survey periods did not substantially cover May–June or most of September.

Observation 19

- Some survey data relied on earlier 2022 work supplemented by 2024 surveys.

Observation 20

- Detector D01 required redeployment due to technical issues. This was the area which the Lemanaghan bat survey picked up 7 of the bat species known in Ireland and 2 more than the bat survey conducted by Bord Na Mona.

Please see below attached Bat Survey conducted in August 2024.

Signed

Eddie Buckley

Chairman Offaly Bat Group

Ballycumber Village

Ballycumber

Co. Offaly

085-2270566



Date

26/5/2026



Bat Survey . August 2024.

This report has been prepared by Jim Minogue Environmental Consulting with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is prepared for a private client and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk

1. Bat Survey	
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1.1 Introduction

Jim Minogue was commissioned by Ciara Egan to undertake a bat survey on a site lying within peatland, scrub, pasture and meadow lands at Co Offaly in August 2024. This survey was to determine whether the site and an existing structure was being utilised by bats.

The survey was undertaken following a submission for the development as a wind farm with the construction of turbines, roadways and cable infrastructure. The peatland is worked and cutover raised bog, with signs of vegetative succession occurring. The building is a stone and galvanised single story house within an abandoned farmstead. The August 2024 survey found the structure not being utilised by bat species. The site did provide good habitat for bat species in terms of foraging and commuting routes

1.2 Desktop research.

Prior to the site survey a review of existing information on bat roosts and local activity was undertaken. The national biodiversity database was searched for records of all bat species within a 10km grid of the site (Grid N12). A number of the nine species of resident Bats have been recorded in this area. The following bat species were recorded in the 10km N12 square on Biodiversity Ireland Maps.

- Brown Long-eared Bat (*Plecotus auritus*)
- Daubenton's Bat (*Myotis daubentonii*)
- Leisler's Bat (*Nyctalus leisleri*)
- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)

On a survey conducted on an adjoining farm last year the above bats were monitored as well as the above species.

- Natterer's Bat (*Myotis nattereri*)

This survey conducted in August 2024 additionally monitored Whiskered bat (*Myotis mystacinus*) present in the area.



Graphic 2: bat landscape surrounding site (Biodiversity Ireland)

The below survey illustrates that this is a relatively significant area for bat species, preservation of habitat and maintenance of foraging, commuting routes and of summer and winter roosts would be important for their conservation in this landscape.

All Irish bats are protected under European legislation, namely the Habitats Directive (92/43/EEC). All Irish species are listed under Annex IV of the Directive, requiring strict protection for individuals, their breeding sites and resting places. The lesser horseshoe bat (*Rhinolophus hipposideros*) is further listed under Annex II of the Directive, requiring the designation of conservation areas for the species. Under this Directive, Ireland is obliged to maintain the favourable conservation status of Annex-listed species. This Directive has been transposed into Irish law through the European Communities (Birds and Natural Habitats) Regulations 2011.

In addition, Irish species are further protected by national legislation (Wildlife Acts 1976-2018). Under this legislation, it is an offence to intentionally disturb, injure or kill a bat or disturb its roost. Any work at a roost site must be carried out with the agreement of the National Parks and Wildlife Service (NPWS) and a derogation licence must be granted before works commence.

1.3 Competences and limitations

Limitations: the weather for the evening survey was conducive to bat activity and the survey was undertaken during the bat activity season on the 27th of August 2024. This would be within the breeding season with young bats in maternity roosts prior to being weaned. Non breeding individuals would be in satellite roosts. The temperature was 14 C with broken cloud.

1.4 The site.

The structure and the surrounding site was in a settled area with good vegetation and tree lines,



Graphic 3: The wider landscape, showing cutover peatland, extensive and intensive agriculture with hedgerows and plantations.

The habitat occurring surrounding the project site is representative of the Fossitt habitats: Raise bog (PB1), cutover bog (PB4), dry calcareous grasslands (GS1), dry meadow and grassy verges (GS2), tree lines (WL2), and hedgerows (WL2). Within the wider landscape existing land-use is mixed agricultural with cropping and grazing with cattle, sheep and horses, with silage and hay meadows. There is cultivated and tilled land (BC3). There are mixed (WD3) and pure (WD4) conifer plantations. There are dwellings and farmsteads scattered along roads. The roadways and yards and other building units has resulted in buildings and artificial surfaces. (BL3). Some of these habitats are important ecological features and contribute to the linear landscape connecting the immediate area and wider agricultural landscape. The variety of habitats present exists within a relatively highly settled area with good landscape features and habitats in the vicinity. The land is intensively and extensively farmed and is highly settled with relatively high levels of human activity. The decline in human activity with the reduction of peat extraction has led to increased availability of habitat for biodiversity.

No features such as cellars or caves are present on site.

2. The Survey

During the daylight/evening survey around the structure, external evidence such as the following was taken into consideration:

- The presence of droppings on surfaces around the interior/exterior of the house
- Urine staining beneath access points;
- Scratch marks around access points; and
- Visual signs of roosting bats.

The roof comprises timber joists with galvanized sheeting . There are small crevices in the stone wall and along wall plates and apex. Bats exiting and access to the house was presumed likely through the roof or wall plate or soffit. There were no visible signs of bat activity sighted in the cottage and monitoring equipment did not record activity from within. There were no bats monitored emerging from the house on the night of the survey.

The bat survey was undertaken on the 27th of August 2024. It comprised of monitoring and recording bat species which might or might not emerge from the structure at dusk. If bats were recorded emerging on the evening survey, a dawn survey would be required to ascertain if bat species returned to roost. The survey took a transect through the peatland and the pasture adjoining it monitoring and recording bat species encountered.

Bat Detector Surveys methodology

Prior to the survey a full site walk was undertaken to assess areas where bat activity was likely.

Sunset on August 27th was at 20.31 at Ferbane. For two hours after sun-set, one surveyor undertook a survey around the house, to record any potential emerging bat species and along a transect to determine commuting/foraging. This was undertaken with a Batlogger M2 hand-held monitor.

Ultrasonic bat detectors were also used during the survey to aid the detection of bats. Sweeps were made at lower to higher frequency to establish the presence or otherwise of all potential bat species.

The following equipment was used:

- A Ciel Electronique CDP102 R3
- Batlogger handheld M2
- High-powered hand torches and head torches.

Bats were identified in the field to species level, *Myotis* sp. were identified to family level.

During hand-held bat surveys species were identified in real time by recording peak frequency. Notes were also made on the time of recording and type of behaviour of each bat encountered during the activity surveys, such as flight type and altitude.

2.1 Limitations

The survey was within the bat activity season. Weather conditions was optimal for bat surveys, with good visibility and calm conditions. The site was in a quiet part of the countryside with good landscape features present for bats, no artificial lighting and good insect activity. Various dwellings and farmsteads meant moderate levels of human activity, away from the site. There were few limitations for this survey.

2.2 Results

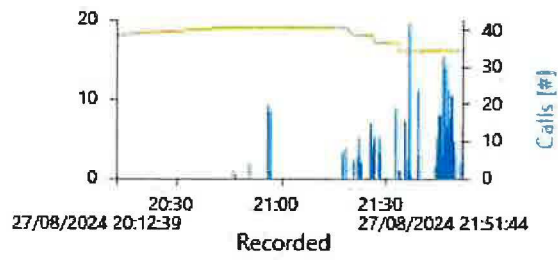
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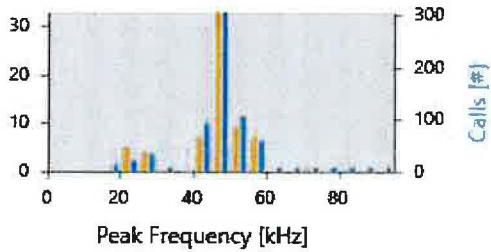
● <i>Plecotus auritus</i>	3	6
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● <i>Pipistrellus pipistra</i>	30	308
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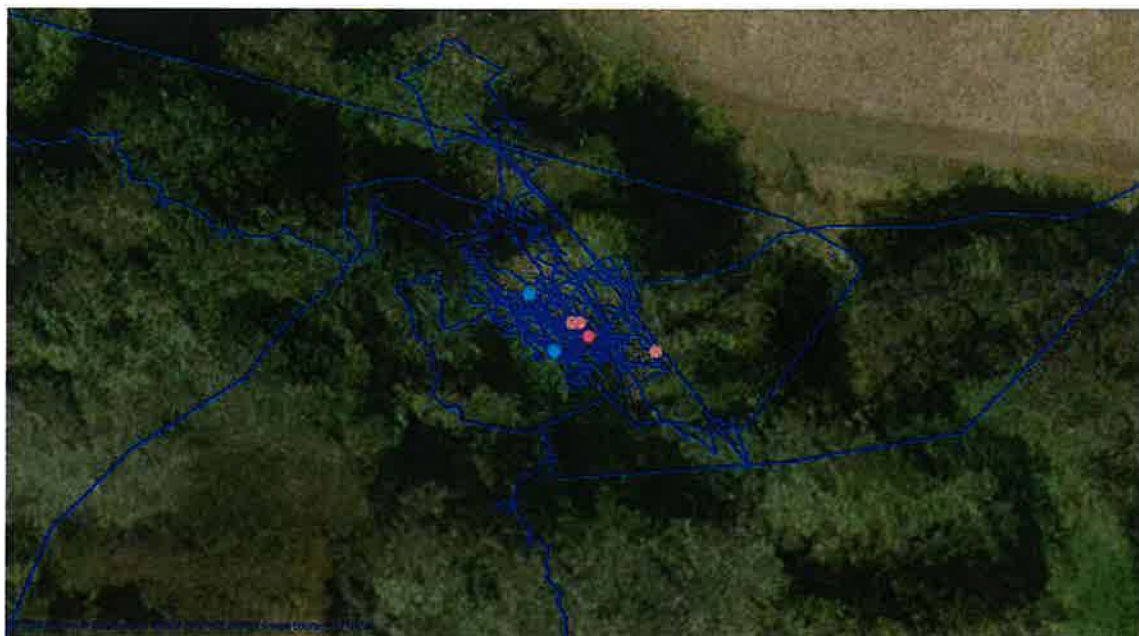
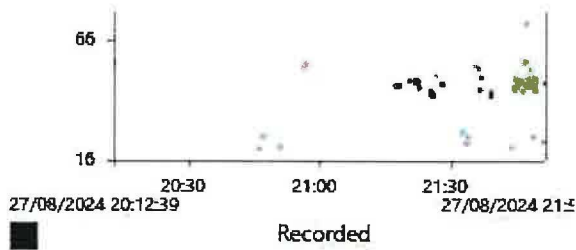
Above; Key and species surveyed, the figure to the left is recordings and the figure to the right is calls made. Species are colour coded with the same on the map below.



Bat activity around the site during survey.



Bat species and frequencies below



The above graphic shows species around the structure which were recorded with a Brown long eared bat (*Plecotus auratus*) monitored at 20.45 a Leisler's bat (*Nyctalus leisleri*) monitored at 20.46 and a Soprano pipistrelle at 20.56. These species being recorded at these times of the evening would suggest that they are utilising roosts in trees or abandoned structures in the vicinity of the cottage.



Graphic : Showing species around the site including all bats monitored and identified..5 out of the 7 bat species surveyed were located around the peatlands. Daubenton's bat (*Myotis daubentoniid*) and Whiskered bat (*Myotis mystacinus*) were associated with the pasture land to the east, yet are well within foraging range of the peatland site.



The above graphic illustrates the importance of edge habitats and linear features for the bats in this area for commuting between roosts and foraging. Pipistrelle species were encountered on the peatland while Leisler's bat and Brown long eared bat were monitored around the cottage. Natterer's bat was recorded on the eastern boundary of the peatland and pasture land. Daubenton's and Whiskered bat were located to the east on pasture land.

2.3 Evaluation

A bat dusk survey with a static survey carried out on the 27th of August 2024 confirmed bats utilizing the site, but not the structure

There is always some limitations in concluding on use of buildings based on one survey, however the building is small in scale and with one surveyor and a fixed static as well as a hand-held Batlogger, any bats present were recorded. The evidence recorded during the survey did not find any bat species utilising the building. This could be due to it being open for predation, there were signs of pine martin activity within the building.

The monitoring of 3 species of bat around this old farmstead which was significantly encroached with scrub and with very low levels of human activity would suggest the presence of satellite roosts in the vicinity.

3. Recommendations

The survey undertaken demonstrate the significance of the landscape in particular the existing trackways, hedgerows and treelines that bound the site, for 7 bat species, these habitats are significant and important linear features for the local bat community and are of high value for foraging and commuting bats.

There are a variety of mature broadleaved treelines surrounding the site. There are a diversity of wet-land and dry-land habitats with extensive agricultural intensity surrounding the site. The wetlands, woodland habitat and residues from agricultural activity meant good insect life.

Connectivity for bat species to the larger landscape is important, this is created by the maintenance of linear features such as tree-lines or hedgerows, ideally this linear feature gaps should be under 5m wide, as some bat species do not cross open non-linear feature areas.

There is a positive association for a number of bats, between the extent and proximity of broadleaved woodland and roost locations. Having such woodland to shelter, screen and provide foraging for the bats utilising the landscape is of considerable importance.

Hedgerows can also be both a barrier to disturbance and a screen for any light or background noise. The management of the hedgerow for its stated objectives is of importance. It should exhibit the following in terms of creating beneficial conditions for bats.

The hedge should be wide and tall (at least 2.5m) comprising native species and ideally pollinating plants. To add the screening effect of the hedge, if needed, it is thought to include holly at a relatively high density giving year round screening. Willows and blackthorn give early season nectar for insects, hawthorn, bramble and rose give summer nectar and ivy gives autumn nectar. These species also produce berries and create habitat for an number of species of insect and birds.

Commuting Routes

Hedgerows are a good way to link foraging and commuting routes for bat species. When there are standard trees present it can increase the abundance and diversity of moths as prey. Due to the increasing incidence of ash-die-back disease there will be older standard trees that will die in the coming years.

The linear features consisting of drains, tracks, hedgerows, groves and tree-lines are all important for bat species commuting and foraging. The removal or loss of these features therefore have the potential to affect local bat species.

A suitable measure, to ensure minimum disturbance to bat species would be the enhancement of hedgerows throughout the site. The opportunity to provide additional ecologically appropriate planting and provide for pollinator friendly planting in line with the All-Ireland Pollinator Plan (particularly night scented or moth friendly planting) could provide additional foraging resources for bat species within the area. It would also increase commuting pathways.

Lighting

The reduction and minimising of additional light and light pollution is a key conservation measure, in addition to bat friendly lighting structures and bulbs. The avoidance of additional light or light spill on the utilised linear features is of particular importance in this regard, with particular attention paid to the provision and maintenance of dark corridors along these features.

Guiding principles in design should be that lighting should only be erected where it is needed, in use for the required time that it will be utilised and only at levels that enhance visibility

Using the minimal lighting required for safety, there should be no excessive lighting, both in time duration and spatial spread. Never illuminate commuting or foraging or roost areas. Minimise light spill and do not utilise bare bulbs or any up lighting. The linear features formed by trackways, hedgerows and tree-lines are important for bats commuting and foraging.

Light should be spread below or near the horizontal - flat cut off lanterns and shaded down lighting achieve this.

Narrow spectrum bulbs should be used, this reduces the amount of species affected by artificial lighting. Light should minimise the amount of ultra-violet and white and blue wavelengths in the light spectrum. This avoids attracting insects that might otherwise be in foraging areas and available as prey.

It is important to note that the winter when most lighting is required is also the dormant period for bat activity.

4. Conclusion

The maintenance of the commuting and foraging corridors and provision of an appropriate buffer around these linear features should maintain the overall connectivity within the wider landscape.

The surveys have shown the active use of the site and its landscape features that bound this site for foraging and commuting; the mature and dying trees may also support roosting bats at different times of the year. The presence of the three *Myotis* species on the survey are of note as two of these species were not previously recorded. There is good bat habitat around the peatlands.

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August 2024

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