Appendix 5. Biodiversity

5.2 Bat Report (Caroline Shiel, 2025)

CASHLA PEAKER PLANT BAT REPORT

Prepared for

ATKINSRÉALIS

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1. INTRODUCTION

I was contracted by AtkinsRéalis to conduct a preliminary scoping survey for bat potential on the Cashla Peaker Plant project at Pollnagroagh / Rathmorrissy, Athenry, Co. Galway. This preliminary survey was followed up with bat detector surveys to monitor bat activity levels on site.

The site is located 2 km west of Athenry, immediately north east of the junction between the M18 and M6 motorways. The proposed access route is from the L3103 to the north east of the site

Figure 1 – showing location of site to north east of M18/M6 junction and proposed access route.

2. DATABASE SEARCH

Bat Conservation Ireland's database was searched for records of bats within 1km of the proposed site. There are no roost records within 1km of the site. There are two records of foraging bats from Castlelambert (north west of site, on western side of M18). The first record is from Batlas 2010 – Soprano pipistrelle, Common pipistrelle and Brown long-eared. The second record is from Batlas 2020 - Soprano pipistrelle.

There are 14 records of bat roosts within 10km of the proposed site –

Site Name	Grid Reference	Species	Date
Aggard House outbuildings	M501186	Common pipistrelle, Brown long-eared, Whiskered	2003
Caherdangan Bridge	M518204	Daubenton's (5)	2009
Claregalway Friary	M372334	Daubenton's (50+)	2016
Derrydonnell More Castle	M453252	Lesser horseshoe (1), Brown long-eared, Natterer's, Soprano pipistrelle	2006
Derrydonnell Railway Bridge	M464258	Common pipistrelle (2)	2005
Dunkellin Bridge	M443221	Daubenton's (1), Natterer's (1), Soprano pipistrelle (1)	2005
Farm House Roost	M464261	Myotis spp (6)	2005
House Craughwell	M523211	Leisler's (7)	2022
Kilcornan Stable building	M425205	Soprano pipistrelle (1), Common pipistrelle (1), Leisler's (1), Brown long-eared (1)	2020
Lavally House	M449220	Brown long-eared (42)	2014
Old House, Galway	M497241	Pip spp (colony in attic)	2021
Rahasane Tunnel Roost	M474184	Lesser horseshoe (1)	2006
Silverroe	M506239	Brown long eared (40)	2022
Toberbracken Bridge	M438221	Daubenton's (1)	2006

Table 1 – records of bat roosts with 10km of site

There are only two records of Lesser horseshoe bats within 10km of the proposed site. A single bat was recorded at Derrydonnell More Castle in 2006 and a single bat hibernating in a tunnel at Rahasane in 2006. Derrydonnell More Castle lies approximately 3km to the south west of the site and Rahasane Tunnel approximately 8.7 km to the south east.

Survey methodology was based on guidance from BCT (2023) *Bat Surveys for Professional Ecologists – Good Practice Guidelines.*

3. SITE VISIT – PRELIMINARY WALK-OVER SURVEY

The field which will contain the Peaker Plant is currently planted with grass for hay/silage (Improved agricultural grassland GA1). The field is roughly triangular in shape. The south eastern and north eastern field boundaries are comprised of a stone wall and occasional trees. There is a treeline of mature trees along the western half of the north eastern site boundary. The western boundary with the M18 is comprised of a wooden post and rail fence. Some scrub has developed between the wooden fence and the M18 road.

The access road runs along the western side of a stone wall for most of its length, then crosses a field to open onto the L3103 local road.

The site was walked on the 07/02/25 to assess the site for potential bat roosts and foraging areas. There is a small concrete shed standing in the southern section of the field. The shed is roofed with corrugated metal sheets. The shed was assessed as having low potential for roosting bats. It could be used as a night roost by bats (Lesser horseshoe bats) or provide a site for bats to roost while processing prey (Brown long-eared bats).

The south eastern field boundary is comprised of a low stone wall with occasional trees including sycamore, holly, hawthorn, hazel and ash. None of these trees were sufficiently mature to provide suitable roosting sites for bats in the form of crevices, rot holes etc. The stone wall on the north eastern boundary is higher and could be used as a commuting route by bats. There is a treeline of mature trees along the western half of the north eastern boundary. The species include mature ash, and sycamore. Some of the ash trees are showing signs of ash dieback disease. Several trees contained suitable roost features for bats. This is a relatively sheltered area and is a suitable foraging site for bats. The fields to the north east of north eastern boundary are used as pasture field for a large herd of dairy cows.

The western boundary with the M18 is very exposed and considered to be unsuitable for foraging bats.

The general landscape is karst dominated, with numerous turloughs in the environs.

4. RESULTS

The concrete shed on site was considered to have low potential as a roost site for bats. It is in a very exposed location.

The mature ash and sycamore trees on the north eastern boundary were considered to have medium potential for roosting bats. Suitable crevices were clearly visible from ground level.

The vast majority of the site is too exposed to provide ideal foraging conditions for bats. There is an area at the north eastern boundary with a treeline of mature trees which is relatively sheltered and suitable as a foraging site for bats.

Photos – preliminary walkover survey

7/2/25

Photo 1 – looking north east along boundary wall from entrance gate

Photo 2 – view north across site of proposed new gas plant site

Photo 3 – concrete shed in exposed location in southern section of site

Photo 4 – concrete shed with corrugated metal roof

Photo 5 – rear of concrete shed

Photo 6 – sparse trees along southeastern boundary of site

Photo 7 – mature hawthorn fallen in field as a result of Storm Éowyn

Photo 8 – view towards north east corner of site – trees heavily cut back

Photo 9 – hawthorn with crevices suitable for bats – no bats recorded

Photo 10 – sparse trees along boundary wall

Photo 11 – fallen hawthorn tree on north eastern boundary

Photo 12 – pasture field to north east of site

Photo 13 – mature ash and sycamore trees on both sides of gate in north eastern boundary wall. Trees contain crevices suitable for bats

Photo 14 – close up of mature trees beside gate

Photo 15 – ash with advanced Ash die-back disease on north eastern boundary

Photo 16 – ash with advanced Ash die-back disease on north eastern boundary

Photo 17 – trees fallen due to impact of Storm Éowyn

Photo 18 – trees fallen due to impact of Storm Éowyn

Photo 19 – trees fallen due to impact of Storm Éowyn

Photo 20 - trees at north eastern boundary wall – good foraging habitat for bats

Photo 21 – looking north east towards pasture field grazed by herd of dairy cows

Photo 22 – looking west along northern boundary towards M18

Photo 23 – ash trees with Ash die-back disease on northern boundary

Photo 24 – ash trees with Ash die-back disease on northern boundary

Photo 25 – mature sycamore and ash tree in north west corner of site

Photo 26 – crevice suitable for bats in ash tree at north west corner of site

Photo 27 – looking south along boundary fence with M18

Photo 28 – looking south along boundary fence with M18

5. BAT DETECTOR SURVEYS

On 04/06/25 four Songmeter 4 static bat detectors were deployed to monitor bat activity on site. The detectors were left in place until 17/06/25 which gave 13 consecutive nights of recordings. Detectors were programmed to switch on 20 minutes before sunset and switch off 20 minutes after sunrise.

Four sites were chosen as follows – at doorway to concrete shed in field (Site 1), half way along south eastern boundary wall (site 2), at gate in north eastern boundary wall (Site 3) and at a well-like structure close to the northern section of the access route (Site 4).

Figure 2 – showing positions of 4 static detectors on site

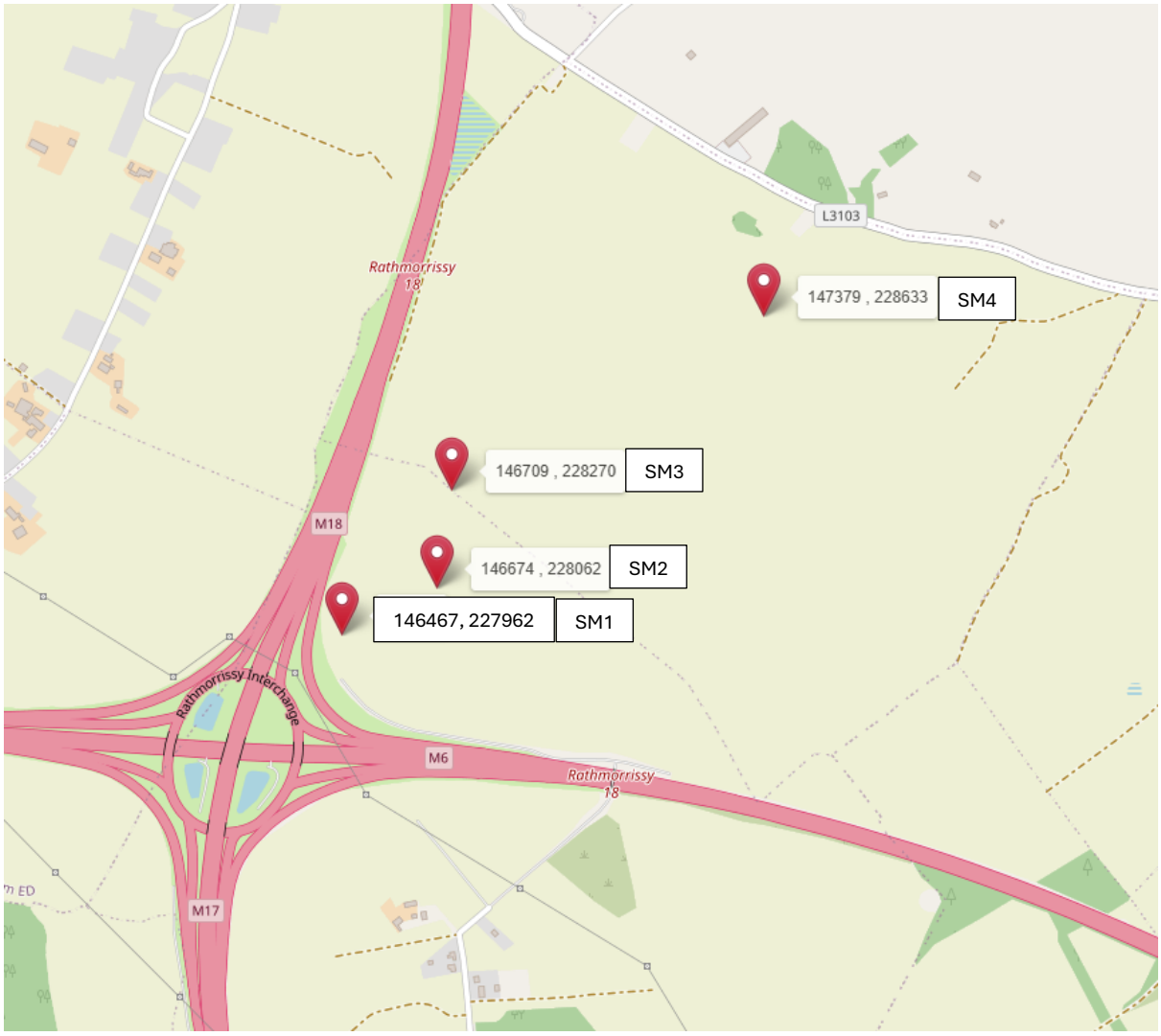

Figure 3 – showing positions of 4 static detectors on site

6. RESULTS

All recordings were analysed using Kaleidoscope Pro by Wildlife Acoustics.

Songmeter 1 was positioned at the doorway to the small concrete shed on site. Calls from Leisler's bat, Soprano and Common pipistrelle would have been issued by bats foraging over the field outside the shed. Two calls of Whiskered bat were recorded inside the shed. This analysis reveals that the shed is not regularly used by bats as a night roost. It is not used by Brown long-eared bats as a feeding perch to process prey items.

SONGMETER 1 3664	**NO. OF CALLS**	**Average No. of calls per night**	
Leisler's bat	692	53.23	
Common pipistrelle	49	3.76	
Soprano pipistrelle	42	3.23	
Whiskered bat	2	0.15	
TOTAL	**785**		

Songmeter 1 (SM3664) in shed. Grid reference 52.299492, -8.6037127

Songmeter 2 was deployed half-way along the southern eastern boundary of the site which is comprised of a low stone wall and occasional small trees. Calls from foraging Leisler's bats would have been from bats foraging over the adjacent fields. Common and Soprano pipistrelle bats would have been detected foraging along the tree line at the boundary wall. Two Whiskered bats calls and a single Brown long eared bat call were detected. This site is not a favoured foraging area for these two species.

SONGMETER 2 7863	**NO. OF CALLS**	**Average No. of calls per night**	
Leisler's bat	815	62.69	
Common pipistrelle	1141	87.76	
Soprano pipistrelle	1801	138.53	
Whiskered bat	2	0.15	
Brown long-eared	1	0.07	
TOTAL	**3760**		

Songmeter 2 (SM7863) at wall/hedgerow running southwest/northeast. Grid reference 52.300388, -8.8006665

Songmeter 3 was deployed approximately half-way along the north eastern boundary which is comprised of a higher stone wall and a tree line of mature trees. The highest number of Leisler's bats was detected at this location. This is not surprising, as Leisler's bat targets yellow dung fly *Scathophaga stercoraria* during the summer months. A large number of Yellow dung flies were seen on cow pats in the pasture fields to the north of this detector location. High numbers of both Soprano and Common pipistrelles were also detected. The area under the trees provides ideal foraging conditions for bats due to the shelter provided by the trees and the abundance of insects.

Slightly higher activity of Whiskered bat and Brown long-eared bats was detected at this location under the mature trees. It is possible that these species are roosting in tree cavities.

SONGMETER 3 8028	NO. OF CALLS	Average No. of calls per night	
Leisler's bat	1565	120.38	
Common pipistrelle	1727	132.84	
Soprano pipistrelle	1035	79.61	
Whiskered bat	4	0.30	
Brown long-eared	8	0.61	
TOTAL	**4339**		

Songmeter 3 (SM8028) at wall/treeline running southeast/northwest under mature trees. Grid reference 52.302260, -8.8001765

Songmeter 4 was deployed at a well-like structure close to the access route to the north of the site. 14 calls of Nathusius' pipistrelle were recorded at this site. This species was not recorded elsewhere on site. Relatively low numbers of calls of other bat species were recorded. It is unlikely that this site is used as a roost site.

SONGMETER 4 8025	NO. OF CALLS	Average No. of calls per night	
Leisler's bat	256	19.69	
Nathusius' pipistrelle	14	1.07	
Common pipistrelle	332	25.53	
Soprano pipistrelle	163	12.53	
Whiskered bat	0	0	
Brown long-eared	1	0.07	
TOTAL	**766**		

Songmeter 4 (SM8025) at well-like structure. Grid reference 52.305589, -8.7901868

Photo 29 – songmeter 1 place on vegetation at door to concrete shed

Photo 30 – showing location of Songmeter 1 at shed

Photo 31 – Songmeter 2 on tree on southeastern boundary wall

Photo 32 – close-up of Songmeter 2

Photo 33 – showing position of Songmeter 3beside north eastern boundary wall

Photo 34 – Songmeter 4 at well-like structure

Photo 35 – well-like structure surrounded by stone wall and hawthorn trees

Photo 36 – showing depth of well-like structure

7. CONCLUSION

A total of 6 bat species were recorded foraging on site – Soprano pipistrelle, Common pipistrelle, Nathusius' pipistrelle, Leisler's bat, Whiskered bat and Brown long-eared bat. No Natterer's bats or Daubenton's bats were recorded on site. No Lesser horseshoe bats were recorded on site.

The site is mostly too exposed to provide suitable foraging conditions for bats. One area under the mature tree line on the northeastern boundary had relatively high bat activity. Crevices suitable as roosting sites for bats were recorded in some of these trees. Any trees scheduled for felling to facilitate this project should be supervised by an experienced bat ecologist.

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