

Cairde Credit Union Site, Cappoquin, Co. Waterford



BAT SURVEY

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1. INTRODUCTION

Ecofact was engaged to undertake a bat survey of the Cairde Credit Union premises at Cappoquin, Co. Waterford. Bats were known to be present in the building and were causing issues in relation to odour. Bats were also entering the building. This has affected the operation of the Credit Union, and the staff are unable to use the upstairs offices. The current survey was undertaken during July and August 2005.

1.1 Bat species in Ireland

There are eleven recorded bat species in Ireland, nine of which are considered resident on the island. Eight resident bat species and one of the vagrant bat species are members of the Vespertilionidae family. The ninth resident species is the Lesser Horseshoe Bat *Rhinolophus hipposideros*, which belongs to the Rhinolophidae family.

The resident Irish bat species are:

- Daubenton's bat (*Myotis daubentonii*)
- Whiskered bat (*Myotis mystacinus*)
- Natterer's bat (*Myotis nattereri*)
- Leisler's bat (*Nyctalus leisleri*)
- Nathusius' Pipistrelle (*Pipistrellus nathusii*)
- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Brown Long-eared bat (*Plecotus auritus*)
- Lesser Horseshoe Bat (*Rhinolophus hipposideros*)

Other bat species (vagrants) recorded are:

- Brandt's bat (*Myotis brandtii*)
- Greater horseshoe bat (*Rhinolophus ferrumequinum*)

According to Bat Survey Guideline for Professional Ecologists (Collins, 2016), bat species found in Ireland are thought to have a core sustenance zone of between one and four kilometres. A core sustenance zone refers to the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost. This may be used to infer a likely zone of influence for bats if a roost were to occur within the subject lands.

1.2 Legislation Relating to Bats

Bats are strictly protected under both national and international law. The purpose of this legislation is to maintain and restore bat populations within their natural range. This implies that the habitats on which they rely, and the ecology of their life cycles should not be compromised by human activities. Where activities have the potential to compromise bat populations, measures are required to be put in place to avoid impacts or compensate and mitigate for those impacts. The key legislation which provides protection to bats is outlined below.

In the Republic of Ireland, all bats and their roosts are protected under Schedule 5 of the *Wildlife Act 1976* (amended 2000). It is unlawful to disturb either without the appropriate Licence.



In addition to domestic legislation bats are also protected under the *EC Directive on the Conservation of Natural habitats and of Wild Fauna and Flora* (Habitats Directive 1992). This Directive seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All bat species are protected under Annex IV of the EU Habitats Directive, while the lesser horseshoe bat (*Rhinolophus hipposideros*) is listed under Annex II. Member states are required to designate Special Areas of Conservation for all species listed under Annex II in order to protect them. The EU Habitats Directive has been transposed into Irish law with the European Communities (Birds and Natural Habitats) Regulations 2011.

A total of 41 SACs have been designated for the Annex II species lesser horseshoe bat (1303), of which nine have also been selected for the Annex I habitat 'Caves not open to the public' (8310).

Ireland has also ratified two international conventions which afford protection to bats amongst other fauna. These are known as the 'Bern' and 'Bonn' Conventions. *The Convention on the Conservation of European Wildlife and Natural Habitats* (Bern Convention 1982), in relation to bats, exists to conserve all species and their habitats. *The Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries, which covers certain species of bat.

1.3 Derogation licences

Any works interfering with bats and especially their roosts, may only be carried out under a derogation Licence granted by National Parks and Wildlife Service (NPWS) pursuant to Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (which transposed the EU Habitats Directive into Irish law).

The destruction, alteration or evacuation of a known bat roost is a notifiable action and can only be carried out with a derogation licence from the National Parks and Wildlife Service. Any works that might interfere with bats or their roost sites can only be carried out under licence to derogate from Regulation 23 of the Habitats Regulations 1997 and Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (which transposed the EU Habitats Directive into Irish Law). Details with regards to Appropriate Assessments, procedures and parameters under which derogation licences may be obtained are outlined in Circular Letter NPWS 2/07 '*Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – strict protection of certain species / applications for derogation licences*' issued on the 16th of May 2007 on behalf of the Minister of the Environment, Heritage and Local Government.



Figure 1 Location of the subject site at Cappoquin, Co. Waterford.



2. METHODOLOGY

2.1 Guidelines

The survey and assessment had regard to the methodology outlined in:

- *Bat Mitigation Guidelines for Ireland v2* by Marnell *et al.*, (2022)
- *Bat Tree Habitat Key (BTHK)* by Andrews, H (2018).
- *Bat Surveys for Professional Ecologists: Best Practice Guidelines 3rd Edition* by Collins (2016)
- *Guidance on the strict protection of certain animal and plant species under the Habitats Directive in Ireland* by NPWS (2021)
- *Bat Workers' Manual 3rd Edition* by JNCC (2004) and
- *British Bat Calls: A Guide to Species Identification* (Russ, 2012).

Table 1 Definition of bat roost types adapted from Collins (2016).

Roost Type	Definition
Day Roost	A place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.
Night Roost	A place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
Feeding Roost	A place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
Transitional/occasional Roost	Used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
Swarming Site	Where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.
Mating Sites	Where mating takes place from late summer and can continue through winter.
Maternity Roost	Where female bats give birth and raise their young to independence.
Hibernation Roost	Where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.
Satellite Roost	An alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

2.2 Desk study

The bat suitability of habitat in the study area for bats was obtained using the National Biodiversity Data Centre (NBDC) database. This map provides a picture of the broad scale geographic patterns of occurrence and local roosting habitat requirements for Irish bat species. The maps are a visualization of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats (Lundy *et al* 2011). The NBDC online National Bat Database of Ireland was also accessed to review bat records in the study area.

2.3 Field Surveys

The was visited on the 23rd of July 2025. This survey involved a daytime inspection of the site during daylight hours. The surveys involve looking for evidence of roosting bats including live bats, remains of dead bats, droppings, staining, and feeding remains. A static bat detector (Anabat Chorus) was installed



at the site immediately outside the areas where the bats were understood to be emerging. This detector was left on site to monitor activity for one week. This type of survey involves leaving a static bat detector unit (with ultrasonic microphone) in a specific location and set to record for a specified period of time. Bats which pass near enough to the monitoring unit are recorded and their calls are stored for analysis post surveying. The purpose of this survey was to compliment the emergence/activity survey completed by the ecologists on the site and provided extended monitoring data for the site.

An emergence and activity survey was undertaken on the night of the 14th to 15 of July 2025. The emergence survey extended from 30 mins before dusk to 2.5 hours after. These surveys were completed by two ecologists, one was stationed on the front of the premises, and one at the rear of the site in an adjoining property with a good vantage of the building. The yard area of the Credit Union is very small, and it was not possible to complete the survey from the yard as it was too small to allow a good view of the building,

The surveys involved the use of a thermal imaging scope (Zeiss DTI6 unit with both 20mm and 40mm lenses) and handheld bat detectors (Elekon Batscanner, Echo Meter Touch Pro 2). Bat detectors with ultrasonic microphones are used as the ultrasonic calls produced by bats cannot be heard by human hearing. Bat species emerging from the buildings and adjoining trees on the site were recorded.

Data recorded on the Anabat unit was downloaded and analysed using Anabat Insight software. Bat Calls were identified to species level (where possible) with reference to *British Bat Calls: A Guide to Species Identification* (Russ, 2012). Audio files are a maximum of 15 seconds long and each audio file is taken as a bat pass for each bat species recorded within the audio file. Each bat pass recorded does not equate to the number of individuals of bats flying in vicinity of the recording device but is representative of bat activity levels. Some species such as the pipistrelles will continuously fly around a habitat and therefore it is likely that a series of bat passes within a similar time frame (i.e. separate audio files within a small time frame) is one individual bat. On the other hand, Leisler's bats tend to travel through an area quickly and therefore an individual sequence of echolocation calls, or bat pass is more likely to be indicative of individual bats.



Figure 2 Location of the subject site at Cappoquin, Co. Waterford.



3. RESULTS

3.1 Desk Study

The National Biodiversity Data Centre (NBDC) maps landscape suitability for bats based on Lundy et al., (2011). The maps are a visualisation of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats. Table 1 below gives the suitability of the study area for the bat species found in Ireland (based on NBDC) along with their Irish Red List Status (from Marnell et al., 2009). The overall assessment of bat habitats for the current study area is given as 43.56, which is considered to be Moderate. However, the rating for a number of bat species (Brown Long-eared, Soprano Pipistrelle, Common Pipistrelle, and Leisler's bat is High.

Table 2 Suitability of the study area for the bat species previously recorded in the Leixlip area (based on the NBDC data). Irish Red list status also indicated (based on Marnell *et al.*, 2009).

Common name	Scientific name	Suitability index	Irish red list status
All bats		43.56	
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	47	Least Concern
Brown Long-eared bat	<i>Plecotus auritus</i>	70	Near Threatened
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	57	Least Concern
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	11	Least Concern
Leisler's bat	<i>Nyctalus leisleri</i>	55	Least Concern
Whiskered bat	<i>Myotis mystacinus</i>	43	Least Concern
Daubenton's bat	<i>Myotis daubentonii</i>	42	Least Concern
Nathusius' Pipistrelle	<i>Pipistrellus nathusii</i>	3	Least Concern
Natterer's bat	<i>Myotis nattereri</i>	64	Least Concern

3.1.1 Previous Records

According to the National Bat Database of Ireland as viewed on the National Biodiversity Data Centre, the closest bat record is from approximately 1km east of the subject site and is a Daubenton's bat. There is also a record of a Daubenton's Bat located approximately 2km west of the site. There is also a record of a Common Pipistrelle approximately 2km to the north of the site. There are no other records in the general area of the site, and no bat records from the town. This is not unusual, and bats are generally recorded in Ireland. The records are not of relevance to the current site. It is noted that the absence of bat records does not indicate the absence of bats.

3.2 Field Survey

3.2.1 Daytime Inspection

The daytime inspection and habitat survey was completed on the 23rd of July 2025 on a dry bright day. The subject building is located on Main Street, Cappoquin, Co. Waterford. It is a commercial premises used as a Credit Union. The site is in an urban area; however, there is parkland and woodland immediately to the north within the Cappoquin House and Gardens estate. The front of the building is well sealed. A small yard, located to the rear of an extension, was accessed. The Credit Union is part of a row of terraced buildings. The adjoining buildings are residential, and all have rear gardens. Trees and vegetation on one of the adjoining properties had recently been cleared. The yard is small and



surrounded by a wall. St. Anne's Church is located to the southwest. The small yard, boundary walls, and the complexity of rear gardens and terraced housing made access very difficult. The site manager was aware of the location where bats were emerging, at the corner of the extension roof. Attempts were made to access adjoining gardens, but the residents were not present. The internal areas were then surveyed, and odour from bats was recorded on the first floor. Four dead Pipistrelle bats were also found in one of the upper offices. The manager reported issues with bats occasionally entering the area and flying around inside. The odour was considered very strong and indicative of a significant roost in the roof of the extension. There was also staining on the roof, though it was not clear whether this was due to dampness or bat occupancy. The manager explained that the upper level of the premises could not be used by staff due to the odour, and this was considered a reasonable conclusion.

The survey then continued outside, focusing on areas where further inspection could be completed. Due to security concerns, it was considered impractical to access the yard at night; in any case, the yard was too small and did not provide a good view of the likely locations where bats were emerging.

Practical issues also arose regarding access to adjoining gardens, as this would have required permission to pass through houses at night. The surrounding areas were therefore walked, including the Cappoquin House grounds, to a point where the rear of the Credit Union could be viewed over the wall. It was considered feasible to enter one of the neighbouring gardens from this location, and a suitable vantage point for survey work was identified. It was agreed that the Credit Union would obtain permission for this access. An Anabat Chorus Stationary Detector was then installed in the yard.

The daytime survey confirmed that the building was being used as a Pipistrelle roost, and the location identified by the Credit Union manager was considered the most likely entry and exit point. Use of the building by bats was confirmed by the presence of bat droppings on windowsills in the yard, strong bat odour in the first-floor offices, and the presence of dead bats identified as Pipistrelles.

Ideally for a survey like this we would like to have been able to survey from both sides of the rear of the building. But with terraced houses and private gardens this was not feasible. However, it was considered that the use of a vantage point and having ecologists at the front and rear of the building would be the best compromise, and this was then complemented by the use of the stationary detector.

The Cappoquin House and Gardens estate is considered to provide optimal foraging and commuting habitat for bats, and there are also numbers roosting opportunities in trees and possibly the house itself.

3.2.2 Emergence Watch

The emergence and activity survey was undertaken on the night of the 14th to 15th of July 2025. The emergence survey extended from 30 mins before dusk to 2.5 hours after. The selected vantage point was accessed via the Cappoquin House and Gardens estate. One ecologist was stationed on the front of the building, and one was stationed at the vantage point.

The first bat recorded was a Leisler's bat which was recorded at 21:02. Repeated passes of Leisler's bats were picked up at this time and these were not roosting on the site. A small number of Leisler's bats were likely to have been roosting in trees on adjoining properties. Bats commenced emerging from the subject building at 21:12 with n=16 emerging in succession by 21:16 when a domestic cat arrived on the roof. This cat is known to have taken an interest in the bats in the past. A total of 197 bats were estimated to have emerged by 22:00. The bats were flying away from the observer to the southeast and



were not very vocal, and this may have been due to the presence of the domestic cat. Not all the bats were picked up on the detectors, but they were confirmed to be Soprano Pipistrelles.

Common Pipistrelles were also picked with the first one detected at 21:25. It is not thought that this bat came from the subject building. This species is also roosting nearby, but it was confirmed that the bats emerging from the roof were all Soprano Pipistrelles. This is also supported by the static detector surveys (see Section 3.2.2).

The bats were observed emerging from the location that was already identified by the Credit Union manager. The exit /entry location is the at the corner of the roof and the bats are emerging from under the fascia. No bats were see emerging from any other parts of the building. The bats emerged and flew to the southeast and out of sight. They did not cross over the roof the terrace and were not detected by the ecologist on Main Street. The bats are likely to have commuted through the gardens and then into the Cappoquin House and Gardens estate.

Following the emergence survey a general survey along the back of the terrace with the Cappoquin House and Gardens estate was completed, and moderate activity of Soprano Pipistrelles, Common Pipistrelles, and Leisler's bats was recorded. A few passes of unidentified *Myotis* spp. bats were also recorded, and Brown Long-eared bats were also observed.

3.2.3 Static Detector Results

The Anabat Chorus Detector was left on site from the 23rd of July 2025, and data over 5 full nights was recorded on the unit. A total of four bat species were recorded with Common Pipistrelles being the most frequent bat species recorded. This species was recorded at both dusk and dawn on each night and the activity levels recorded confirmed that this was the species roosting on the site.

Common Pipistrelles were also regularly recorded on the detector, but this species is not roosting on the site. Leisler's bats were also frequently recorded, and this species is roosting nearby, but not on the site. *Myotis* spp. bats were also recorded occasionally over the five nights. These bats are difficult to assign to genus level based on detector data but may be Natterer's bats. *Myotis* spp. bats are not roosting on the subject site. The Cappoquin House and Gardens estate provides ideal habitat for these light intolerant bats.

Across the monitoring period, high levels of bat activity were recorded, dominated by Common Pipistrelles, with additional activity of Common Pipistrelle, Leisler's bat, and a small amount of *Myotis* bat activity. Between approximately 2,000 and 3,000 calls per night were recorded, with overall activity consistently high across all nights. These are calls and do not equate to actual bat numbers.

Soprano Pipistrelle was the dominant species every night, ranging from c.1,160 to c.2,300 calls. These are calls and this is not the number of bats present, as bats can make multiple calls when passing a state. The activity level recorded is consistent with the emergence bat survey which identified the presence of a maternity roost of c.200 Soprano Bats. Common Pipistrelle was regularly present in modest numbers (160–320 calls per night). Leisler's Bat was also detected nightly, with variable activity (188–406 calls per night), indicating frequent commuting and foraging.

Myotis spp. bats were much less frequent, with occasional detections. It likely that some Brown long-eared bats were also present, but they have very faint calls, and no definite calls could be allocated to this species during either the emergence or static detector surveys. A proportion of the calls on each



night could not be identified due to call quality or overlap. This in no way affects the survey and is a typical result of this type of monitoring.

All species were first detected shortly after sunset (from 20:25–20:55). Soprano Pipistrelles remained active until c.04:30–04:40 most nights, with one anomalous late call extending later. Common Pipistrelle activity generally ceased activity earlier (around 04:00). Leisler's Bat activity ended by c.04:00–04:35, though on one occasion extended to 05:44. Soprano Pipistrelle consistently showed the longest and most sustained activity window, consistent with emergence watch observations of a likely maternity roost.

The static survey confirmed the importance of the site for Soprano Pipistrelle, which dominates nightly activity and is associated with the maternity roost in the Credit Union building. Regular use of the area by Leisler's Bat and Common Pipistrelle, reflecting the value of the wider area for commuting and foraging, especially the Cappoquin House east to the north. Both species are roosting nearby, but not on the subject site. Occasional presence of *Myotis* spp. bats is indicated calls, though these were not a significant component of the recorded activity.

Overall, the results of the stationary detector survey confirm and complement the findings of the emergence survey. The site supports a large and locally significant maternity roost of Soprano Pipistrelle and the areas outside of the site boundary to the north are important foraging/commuting area for Soprano Pipistrelles and other bat species. The results of the data summaries from the Anabat Chorus detector are presented in Table 3 and 4. These are summary outputs and provide an index of bat activity only.

Table 3 Summary results of the data collected by the stationary detector over the five-night survey period. This is an index of bat activity only.

Night	Total calls	Soprano Pipistrelle	Common Pipistrelle	Leisler's Bat	Myotis sp.	Unidentified
23-24 July 2025	2783	1517	285	378	111	195
24-25 July 2025	2663	1841	167	188	107	186
25-26 July 2025	2172	1163	176	406	87	152
26-27 July 2025	3156	1955	324	259	126	221
28-29 July 2025	2571	1629	162	313	103	180

The same activity index scale was applied to all species groups. Activity levels are based on the number of bat passes recorded per night:

- Low activity: fewer than 200 calls per night
- Moderate activity: 200–1,000 calls per night
- High activity: more than 1,000 calls per night

This unified scale allows comparison across species, with 'High' consistently representing sustained and intensive activity regardless of species.

Table 4 First and Last Detections per Species (5 Nights). This is a summary of the data collected by the stationary detector and is an index of bat activity only.

Night	Soprano Pipistrelle		Common Pipistrelle		Leisler's Bat	
	First	Last	First	Last	First	Last
Night 1	20:38	04:39	20:50	03:52	20:30	04:31
Night 2	20:32	10:17	20:42	04:12	20:25	04:16
Night 3	20:26	04:38	20:40	03:59	20:30	05:44
Night 4	20:53	04:35	20:50	04:34	20:38	04:35
Night 5	20:25	04:38	20:41	04:22	20:32	04:00

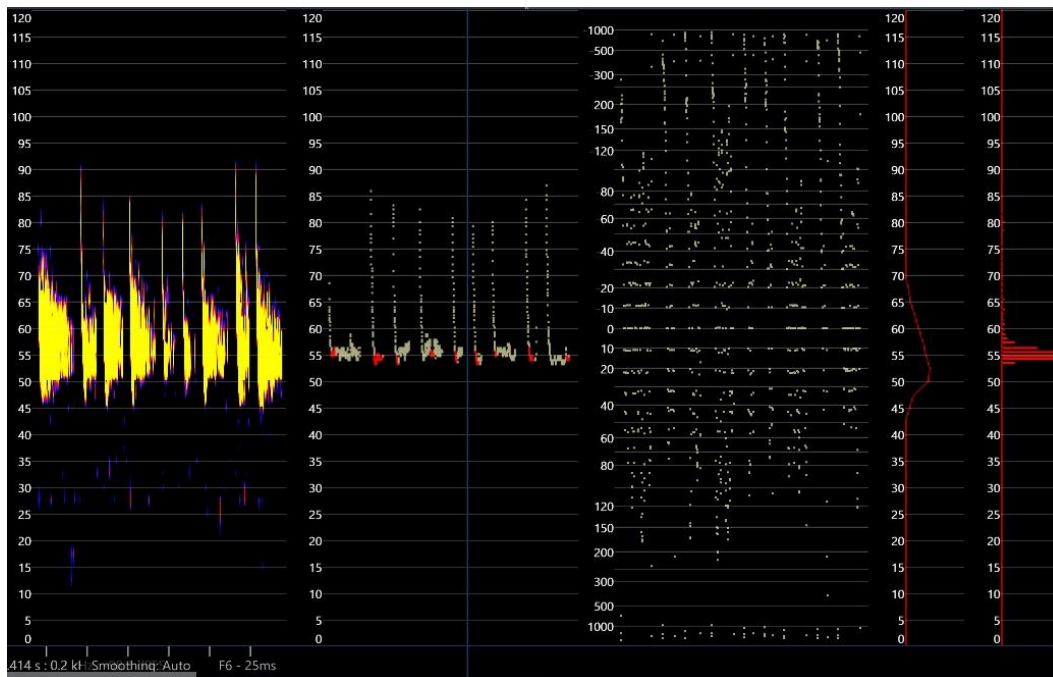


Figure 2 Soprano Pipistrelle sonogram from the current survey.

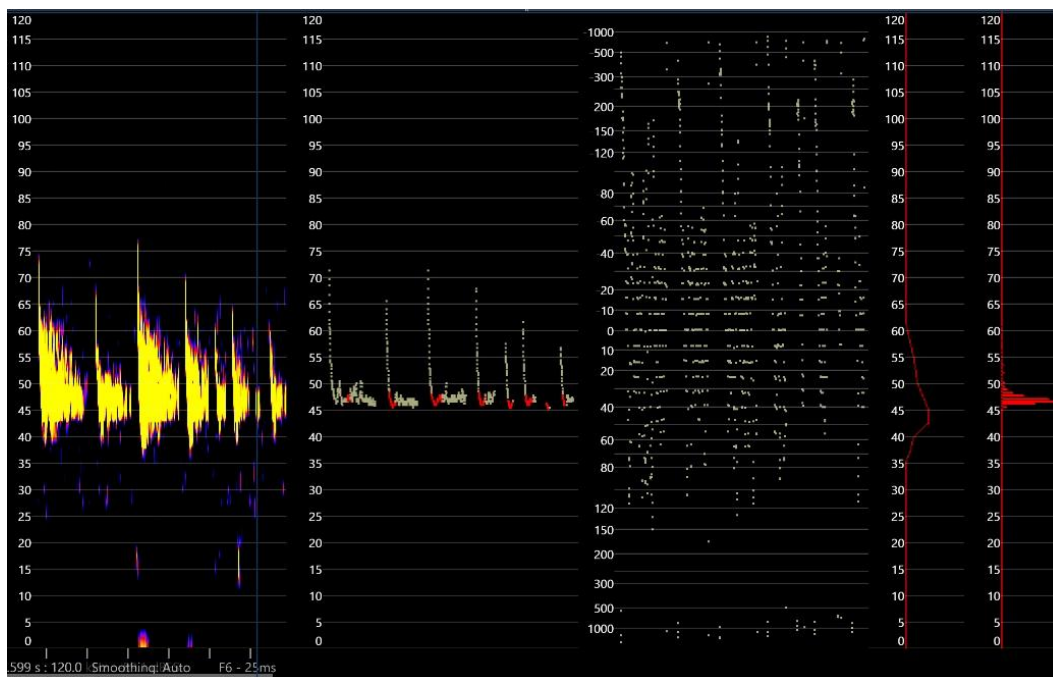


Figure 3 Common Pipistrelle sonogram from the current survey.



4. EVALUATION

The current survey has confirmed the presence of a Soprano Pipistrelle roost in the subject building. Evidence included strong odour, staining, droppings, and dead bats found inside. An estimated total of n=197 Soprano Pipistrelles were recorded emerging from the building. A static detector operated over five nights confirmed Soprano Pipistrelles as the roosting species.

The main entry/exit point was identified at the corner of the extension roof. No other parts of the building were being used by emerging bats. Bats commuted southeast into the Cappoquin House estate. Common Pipistrelles were also detected but there were not using the building. Leisler's bats and some *Myotis* spp. were recorded nearby. Brown long-eared bats are present locally.

Based on the number of individuals present and the seasonal context, it is highly likely that this is a Soprano Pipistrelle maternity roost. Maternity roosts are those where females congregate to give birth and rear young during the summer months, and such roosts represent critical resources for the local population. There are indications that this is long-established roost, with the site manager noting that the presence of the bats is known for over a decade

All bat species in Ireland are strictly protected under the Wildlife Acts (1976–2018) and under the EU Habitats Directive (92/43/EEC), which is transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). It is an offence to disturb, injure, or kill bats, or to destroy, damage, or disturb their breeding sites and resting places. This strict protection applies irrespective of the species involved, the type of roost, or the number of individuals present. Even small roosts with a handful of bats are afforded the same level of legal protection as larger colonies.

Nonetheless, the conservation significance of a roost is influenced by factors such as the number of bats it supports, the roost type, its function within the species' annual cycle, and its continuity of use over time. Soprano Pipistrelle maternity roosts in Ireland are highly variable in size, ranging from a few dozen individuals to several hundred. Typical maternity colonies usually contain between 50 and 200 bats, although larger roosts of over 300 are well documented. In favourable landscapes with extensive foraging habitat, particularly along river corridors, lakes and wetlands, very large colonies numbering in the high hundreds or even thousands of bats have been recorded (NPWS, 2013; Bat Conservation Ireland, 2021). Soprano Pipistrelles do not form large hibernacula but instead disperse into small groups or singly, often in crevices, tree holes, or built structures.

Large maternity colonies are of particular conservation importance, as they can support a significant proportion of the local breeding population. On this basis, the Cappoquin roost can be evaluated as being of high local to county importance. It represents one of the larger maternity roosts of Soprano Pipistrelle likely to occur in the area and plays a key role in sustaining the local population. The loss or exclusion of a roost of this size, without provision of effective mitigation, would therefore represent a significant negative impact on the local population.



5. PROPOSAL

5.1 Project

This is not related to a planning application. The bat roost is causing practical issues including odour and occasional ingress of bats into internal spaces of the Credit Union. Accumulations of bat droppings on windows, roofs and outside our rear entrance have also been an issue. The Credit Union manager has stated that the bats have been an issue for approximately 10 years based on what he has been told. He wants to exclude the bats and then undertake extensive cleaning. The manager has stated they are considering taking down the entire ceiling and may provide a new roof and ceiling.

The manager wants to exclude the bats from the premises. The manager considers the presence of the bat roost to be an issue in all floors of the building. The odour is strong on the upper floors in particular, and occasional bats have been recorded flying around on the ground floor also according to staff. It's not clear how the bats are entering and it may be through vents. The windows of the building are all closed at night due to security reasons. The position of the manager is that they can't have wildlife and staff sharing the same space from an employee welfare and health and safety perspective. Staff can only use 1/3 of the building at this current point in time.

The position of the manager is that this is a public building, providing an important essential service to the local community. There are multiple staff here on site as well as members visiting daily so from a health and safety perspective as well as an employee welfare perspective the manager is currently not prepared to "accommodate" a roost on the building. The available mitigation options were discussed with the manager. The Credit Union wants to progress with a full exclusion without providing any compensatory roost mitigation. The manager wants to exclude the bats during winter, clean, repair and seal the roof.

However, any application this application will have to show that the favourable conservation status of the local bat population will be maintained. The options available and alternatives considered are set out in Section 6.

5.2 Licensing Criteria

All bat species in Ireland, including Soprano Pipistrelle (*Pipistrellus pygmaeus*), are strictly protected under the EU Habitats Directive (92/43/EEC) as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011), as amended. It is an offence to deliberately capture, injure, or kill bats, or to damage, destroy, or disturb breeding sites or resting places.

A derogation licence from NPWS is required where works risk disturbing bats or affecting a roost. A licence can only be granted where all three statutory tests are met:

1. Purpose. Necessary for public health or safety, or to prevent serious damage to property.
2. No satisfactory alternative. No feasible option with less impact on the roost.
3. Favourable conservation status. The derogation will not compromise maintenance of the species at favourable conservation status in its natural range.

In practice, NPWS places strong emphasis on Tests 2 and 3. Total exclusion of a large maternity colony without robust alternative provision is very unlikely to be licensable.



6. MITIGATION OPTIONS

6.1 Introduction

A significant maternity roost of Soprano Pipistrelle bats (c.200 individuals) has been confirmed within the roof structure of the subject building. The roost is causing practical issues including odour and occasional ingress of bats into internal spaces. A number of options for addressing this issue have been explored and evaluated below, in relation to ecological outcome for the bats, licensing risk, effectiveness for odour/ingress, and cost.

6.2 Options considered and evaluation

6.2.1 Option 1 – Do nothing

Ecology: Roost continuity maintained.

Licensing: No licence required if genuinely no works occur.

Odour/ingress: Problems persist; not a viable management solution.

6.2.2 Option 2 – Total exclusion with no mitigation

Ecology: Loss of a large maternity roost; risk to local population.

Licensing: Very unlikely to be licensable for a colony of this size. Fails Tests 2 and 3.

Odour/ingress: Would resolve issues (but is not a compliant pathway).

6.2.3 Option 3 – Retain roost; seal the ceiling and manage odour at source.

Airtight ceiling layer; sealing of all service penetrations; provision of ventilation for occupied spaces; under-licence removal of historic guano and application of appropriate odour-control treatments; retain existing bat access and roof-void ventilation.

Ecology: Roost retained with minimal change to microclimate if designed and implemented carefully. Low risk if timed in winter and supervised by an ecologist.

Licensing: Will require a derogation due to proximity to the roost and risk of disturbance; generally licensable because it avoids impacts on the roost itself and maintains continuity.

Odour/ingress: Can substantially reduce or eliminate odour transfer and prevent ingress if detailing is robust. Residual odour risk remains if airtightness is imperfect. Periodic under-licence guano management may be needed.

6.2.4 Option 4 – Create an “bat loft” on the roof

Dedicated roost compartment: preliminary design for site proposed for top of roof with entrance beside existing roost entrance; repair and clean roof first under licence; loft isolated from occupied building. Works in winter with pre-works checks.



Ecology: Maintains roost continuity and provides durable, purpose-built space. Good outcomes for a maternity colony.

Licensing: Strong case under all three tests; common licenced approach.

Odour/ingress: Effectively eliminates odour in occupied areas and prevents ingress.

6.2.5 Option 5 – Partial retention of modified roof void

Retain a smaller, sealed roost compartment with controlled access where full loft is constrained.

Ecology: Continuity maintained, though careful design needed to preserve suitable volume and microclimate.

Licensing: Generally licensable if the retained space is demonstrably adequate.

Odour/ingress: Good reduction; performance depends on detailing and separation quality.

6.2.6 Option 6 – External bat box arrays

Clusters of high-quality boxes on suitable elevations or nearby structures. Exclusion of bats from main roost.

Ecology: Useful for additional roost options but unreliable as sole replacement for a large maternity roost.

Licensing: Only supportive; not sufficient to justify exclusion.

Odour/ingress: Effectively eliminates odour in occupied areas and prevents ingress.

6.2.7 Option 7 – External “rocket” bat boxes

Large, pole-mounted multi-chamber boxes designed for maternity use.

Ecology: Better capacity than standard boxes, but uptake remains uncertain compared to other options.

Licensing: Supplementary measure; not a standalone replacement for a colony of c.200 bats.

Odour/ingress: Effectively eliminates odour in occupied areas and prevents ingress.

6.2.8 Option 8 – Purpose-built bat house nearby

Construct a dedicated bat house on secure adjacent land (e.g. subject to agreement with landowner).

Ecology: Potential alternative maternity site, but uptake is uncertain and may take time.

Licensing: More complex to justify and evidence; possible but lower certainty than retaining bats in situ.

Odour/ingress: Would resolve building issues once occupied, but there is a material risk of non-uptake.



6.3 Ranking of options

- Option 4 – Purpose built bat loft (most reliable for bats and building, licensable). It would be feasible to construct this on top of the existing extension roof separating the bat roost from the building area while maintaining access at the same entrance that the bats are using.
- Option 3 – Retain roost with sealed ceiling and odour management (often effective, minimal ecological change, modest costs, but may not solve all the issues).
- Option 5 – Partial retention/modified void (good alternative where space is constrained, minimal ecological change, modest costs, but may not solve all the issues).
- Option 8 – Purpose-built bat house nearby (viable but uncertain uptake).
- Option 6 – External bat box arrays (supplementary only, uncertain uptake, cost issue).
- Option 7 – External 'rocket bat boxes' (supplementary only, uncertain uptake, limited space, cost issue).
- Option 1 – Do nothing (does not address management needs).
- Option 2 – Total exclusion with no mitigation (very unlikely to be licensed).

6.4 Preferred option (for bats)

Given the size and status of this confirmed maternity roost, exclusion without robust alternative provision is very unlikely to satisfy the derogation tests. The most realistic and defensible pathway is to retain the colony on site in a controlled manner.

On this basis, the recommended approach is the creation of a bat loft, with sealed separation from occupied areas and dedicated bat access. Where a full loft is not feasible, Option 3 – retain roost with sealed ceiling and odour management provides a strong alternative that can materially resolve odour and ingress while maintaining the roost.

6.5 Selected option (by Credit Union)

The options were discussed with site management. The conclusion is as follows: -

- *We want to progress with option 2 (full exclusion) as previously stated when you gave the list of options weeks back and I will be willing to discuss this with the NPWS if needed.*



7. CONCLUSIONS

A derogation Licence under Regulation 25 of the European Communities (Natural Habitats) Regulations 1997 will need to be obtained for any proposed work from the National Parks and Wildlife Service.

No work on any of the buildings can be undertaken without this licence being in place. Disturbance of a known bat roost is a notifiable action under current national and European legislation.

Internal inspections can also only be undertaken outside of the active bat season and will also require a derogation licence to be in place. Internal inspections would be required to confirm bats aren't hibernating there. However, it is unlikely that bats will be hibernating here as it will be too warm.

Works can be planned for outside active bat season (e.g. October to April) and completed under a derogation licence.

The best approach would be to accommodate the bats in the roof area in a managed way. This would involve installing a bat loft type structure to allow bats to continue to use the roost. This would be a closed off areas designed to be an artificial roost compartment. To facilitate access to this compartment, gaps would be left in the roof so that bats could enter. Incorporating gaps where the existing ones are would be the ideal approach to allow bats to re-enter into artificial roost compartment. The designs of the access tiles and compartment would need to be designed in consultation with an ecologist and would follow the Bat Mitigation Guidelines (Marnell *et al.* 2022). Provision of a small bat loft is the ideal solution as the roost is maintained but in a more managed and controlled way.

If providing ongoing access to the roof area for bats is not agreeable to the Credit Union, artificial roosts away from the house could be provided instead. This would have a reduced likelihood of success and would require the permanent exclusion of bats. This approach would also require a derogation licence and may include the provision of bat boxes / artificial roosts away from the house. The possible provision of a bat house on a neighbouring property could be explored. This is not the preferred approach, and it would be more difficult to get a derogation licence. It may also be impractical as the house would need to be placed in a property not owned by the Credit Union.

Total exclusion with no mitigation is preferred option for the Credit Union but is probably not licensable. The Credit Union has selected this option and will enter into negotiations with NPWS on this matter.

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15th of September 2025



PLATES



Plate 1 The subject Cairde Credit Union Site, viewed from the front of the building.



Plate 2 The subject site, viewed from the rear.



Plate 3 The subject site viewed from the rear on a neighbor's property. This location was considered to provide a better vantage point for the survey and overcome security concerns about nighttime access.



Plate 4 Internal inspection of subject building.



Plate 5 Internal inspection of subject building.



Plate 6 Internal inspection of subject building, dead pipistrelles found.



Plate 7 Dead bats recovered from site – identified as Pipistrelle spp.



Plate 8 Daytime bat habitat inspection of surrounding areas (Cappoquin House grounds).



Plate 9 Daytime bat habitat inspection of surrounding areas (Cappoquin House grounds).



Plate 10 The subject site, viewed from the front of the building at night.



Plate 11 Anabat Chorus unit installed at the subject site.



Plate 12 Vantage point survey using thermal imaging scope (Zeiss DTI6/40).



Plate 13 Thermal image of bat emerging, and a cat taking interest.

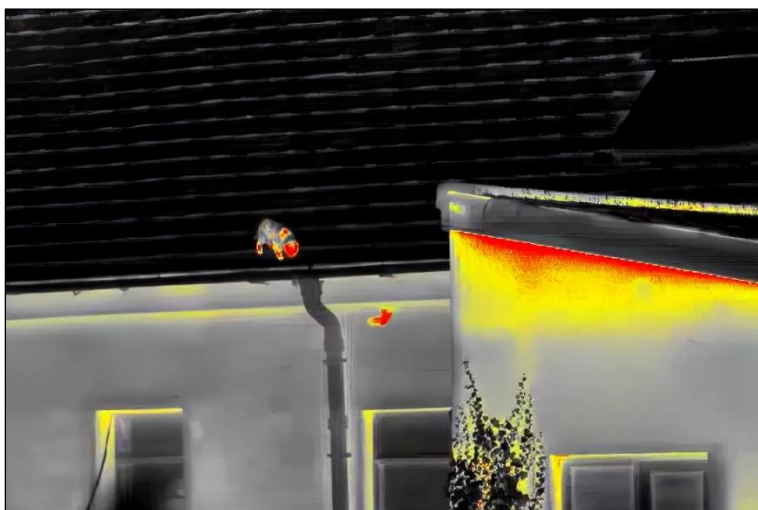


Plate 14 Thermal image of bat emerging, and a cat taking interest.



Plate 15 Location where bats were emerging.



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