



BirdWatchIreland
protecting birds and biodiversity

Wildlife in Buildings

Linking our built and natural heritage

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Comhairle Contae Chiarraí
Kerry County Council



Comhairle Contae
Dhún na nGall
Donegal County Council



An Roinn Tithíochta,
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Introduction

Why have we produced these guidelines?

Our built heritage and our natural heritage are inextricably linked. For as long as we have created structures for our protection and shelter, wildlife has moved in for the very same reasons. Expansion of the modern built environment has a negative effect on biodiversity but also creates opportunities for certain wildlife. From the diverse range of birds and mammals which have colonised abandoned ruins in remote rural landscapes, to wildlife which has moved into suburban and urban areas to live alongside us and even share our homes, buildings have become an integral component of the Irish landscape for biodiversity.

Given the importance of buildings for wildlife, changes to the built environment can affect wildlife associated with it. The loss of old stone structures due to demolition, dilapidation or renovation is linked to declines in species such as Barn Owl and Swift. Modern buildings do not provide the same opportunities for wildlife and changes to existing buildings can impact wildlife which use these structures. Conflict between people and wildlife in buildings is commonplace, but it is always preventable. When problems occur, it is typically wildlife which suffers. This is usually caused by lack of awareness of their presence, or a lack of understanding of how to undertake works on a building in a way that minimises disturbance to wildlife, and takes account of the legislative requirements concerning the protection of wildlife. We have produced these guidelines to provide clear and concise information on these topics, and in doing so hope to increase awareness of the importance of buildings for wildlife and to improve the conservation of wildlife in the built environment. Some of our most iconic and most vulnerable wildlife are reliant on buildings for their survival. We also provide guidance on improving buildings for wildlife, to ensure that as the built environment constantly changes and expands, we continue to make space for nature.



Starlings gather before going to roost on buildings in a city centre

Who is this document for?

This document is for anyone who wants to know more about the importance of buildings for wildlife and should be useful for building owners, those responsible for maintenance of buildings, those who provide advice relating to renovations and new-builds, and those who want to improve their buildings for wildlife. The advice in this booklet is useful for farmers and home owners, as well as designers, planners, architects, engineers, construction workers, local authorities, Heritage Officers, archaeologists and ecologists.

What is in this document?

The following pages include information on:

- The buildings that wildlife use
- The wildlife that use buildings
- Advice on:
 - » Legislation concerning wildlife in buildings
 - » Identifying which wildlife may be using a building
 - » Planning works on a building to minimise disturbance to wildlife
 - » Avoiding conflict with wildlife
 - » Improving buildings for wildlife
- Case studies
- Useful resources



What buildings are used by wildlife?

In order to understand which buildings are suitable for and used by wildlife, it is important to consider the reasons why birds and mammals choose to occupy and interact with buildings and the opportunities that buildings provide for wildlife. Many different birds and mammals use buildings in the Irish landscape for a variety of reasons, but most importantly because buildings can provide safe and secure sites for breeding and roosting. Certain buildings, such as old stone structures, are undoubtedly more suitable for wildlife, given the range of opportunities they offer a variety of species in the form of cracks, crevices, cavities, alcoves, ledges, chimneys and cellars. Other building types, such as modern buildings which are largely inaccessible to wildlife, may be less suitable, but can still meet the requirements of certain species. Birds may build their nests on exterior walls and roof tops, and birds and bats can access the fascia boards and attic spaces of modern buildings, often without our knowledge. Given the diverse range of species that occupy buildings, and their wide-ranging requirements, we should consider that all building types are potentially suitable for wildlife. Nevertheless, individual species prefer certain types of buildings, and it is useful to know the opportunities that different types of buildings offer and the wildlife typically associated with these sites.



Before there were buildings

Before there were buildings, cavity-nesting birds used natural features such as rock fissures and mature trees with hollow cavities. With human encroachment into natural landscapes, and extensive deforestation, the availability of natural sites decreased. As man-made structures increased, many species adapted to use the cavities available in buildings.



Barn Owl nest in a tree cavity



Feeding time at a House Martin nest

Wildlife dependent on buildings

Buildings are the most important breeding site for a wide range of wildlife in Ireland. All nine bat species which occur in Ireland use buildings, as maternity roosts and winter roosts. The majority of our breeding Swift, Swallow, House Martin, Starling and Barn Owl nest in buildings and are reliant on man-made structures.

Old stone structures

We are incredibly fortunate in Ireland that so many of our sites of cultural and historic importance, some centuries old, remain intact in the landscape. These stone structures are a rich part of our cultural heritage and provide a window into our past. At their pinnacle, these buildings were at the centre of Irish society, but are now filled with life of a different kind. As people moved out and history moved on, nature reclaimed these structures.

Buildings such as castles, tower houses, abbeys, churches and ruined mansions, which are scattered throughout the countryside, are now home to an incredible diversity of wildlife. Particularly in ruined, stone structures, there can be many opportunities for wildlife, for both cavity-nesting and open-nesting birds and bats. In some cases, every available space within these ruins is occupied. These are the most important man-made structures for biodiversity as they support the greatest diversity of wildlife, including species of conservation concern. Many of these buildings are protected structures and it is essential that we preserve these sites, both for their historic significance and for their ecological value.

Peregrine: Makes a scrape on a flat, sheltered surface, high in the building



Barn Owl: Nests in cavity of suitable size including within chimneys and putlog holes



Raven: Builds a large stick nest on a sheltered ledge



Swift: Nests in small gaps and cavities in the stonework



Jackdaw: Builds a stick-nest in any available cavity of sufficient size



Kestrel: Nests on a flat, sheltered ledge or shallow cavity



Sand Martin: Nests in small gaps and cavities in the stonework



Brown Long-eared Bat: Roosts in cellars, chimneys, small rooms and cavities.



Biodiversity hotspots

The inhabitants of this castle have included Barn Owl, Kestrel, Raven, Peregrine, Swift, Sand Martin, Jackdaw, Starling, Blue Tit and Wren, as well as several species of bat. With such a diversity of wildlife in such a small area, castles such as this one should be considered among our most important sites for biodiversity.

Abandoned farmhouses

Abandoned farmhouses are common in the Irish countryside and form a distinctive part of the rural landscape. Although they may seem to be devoid of life, this is usually not the case. From large farmhouses to small derelict cottages, these buildings are an important artificial habitat for a range of wildlife.

Chimneys and roof spaces can provide dry, dark and secluded breeding sites for cavity nesting birds, as well as bats and Pine Marten. The interiors of abandoned farmhouses provide shelter for a range of birds which use existing cavities and ledges, or build nests within the protected walls. As many of these buildings are not maintained, they risk falling into disrepair, reducing their suitability for wildlife. Abandoned farmhouses may also be renovated or demolished, and if works are carried out without due regard to the wildlife which resides within, this can result in direct disturbance, as well as the loss of breeding sites.

Jackdaw: Builds a stick-nest in any suitable cavity



Barn Owl: Nests in chimney, roof space or suitable cavity



Kestrel: Nests on a flat, sheltered ledge or shallow cavity



Starling: Nests in any suitable, small cavity



Pine Marten: Den in the roof space



Natterer's Bat: Roost in roof space



Swallow: Builds a mud-nest inside the building



It's in the name

For some species, their association with buildings is obvious from their name. The word 'barn', in the names 'Barn Owl', and 'Barn Swallow', indicates that these birds have a preference for nesting in traditional farm buildings. The word 'house', in the names, 'House Martin', and 'House Sparrow', implies that they often nest in occupied houses.



Farmyards and farm buildings

Agriculture is the dominant land use in Ireland, and the farmyard has been at the heart of rural life for many generations. Much of our wildlife occurs on farmland, and many species have adapted to take advantage of the shelter (and sometimes increased feeding opportunities) in and around farmyards. Traditional farm buildings, as well as performing many purposes, from housing livestock and poultry, to storing grain, food, hay and farm machinery, also supported an array of wildlife which has become synonymous with farming. As agriculture has become more intensive, there is less space for biodiversity, and similar changes have occurred in the farmyard.

Modern farm buildings such as hay barns and slatted houses have been essential in the drive to increase productivity and yields; however, they do not support the same abundance of wildlife that has lived in and around farmyards for hundreds of years. Maintaining traditional farm buildings can have real benefits for biodiversity, and making small changes to modern farm buildings can improve their value for wildlife. Many of the species which use farm buildings are accustomed to people and the frequent disturbances associated with active farms. However, disturbance of wildlife can be an issue in farm buildings which are less frequently used. Therefore, it is important to recognise the wildlife which may occupy farm buildings.

Lesser Horseshoe Bat:
Roosts and breeds at the
roof or in loft space



Jackdaw: Builds a stick-
nest in any suitable cavity



Swallow: Builds a mud-
nest inside the building

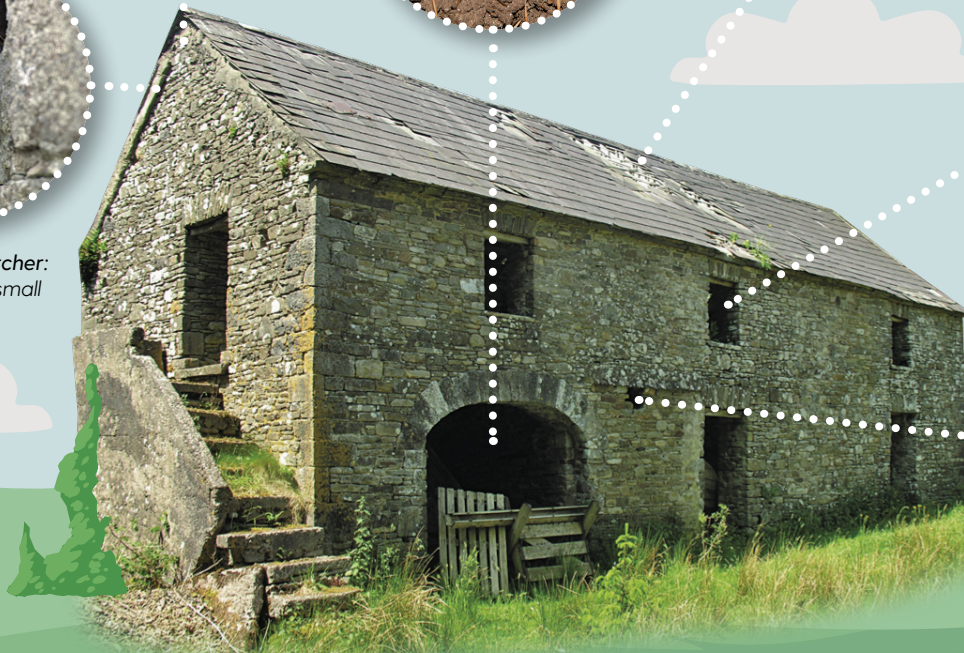


Chough: Builds a stick-nest
on a suitable ledge



Spotted Flycatcher:
Builds nest in small
cavities

Pied Wagtail: Nests in
small holes in stonework



Window to the past

Traditional stone barns were fitted with special 'owl windows' similar to this one, to allow Barn Owls to access and nest in the loft space. Barn Owls were encouraged to nest in farmyards because they helped to keep rodent numbers around the farmyard in check, thus earning them the name, 'the farmer's friend'.

Modern and occupied buildings

Many birds and mammals prefer to avoid people and the regular disturbances associated with occupied buildings. Modern buildings are usually well-sealed, with limited access to the interior, and are devoid of the cracks, crevices and ledges which certain species require. However, several species in Ireland use modern and occupied buildings, and some show a preference for these sites. The increased temperature in occupied buildings attracts certain species and proximity to people can provide greater protection from predators, or access to greater food resources.

Species such as House Martin, which build their nests on the exterior of buildings, and Starling, which access the fascia boards, are regular and obvious inhabitants. Other species such as Barn Owl, Kestrel and even Pine Marten can on occasion take up residence in our homes. In this regard modern buildings probably throw up the greatest surprises in terms of unexpected visitors, simply because we often don't expect to share our homes with wildlife. Conflict between people and wildlife can frequently occur in occupied buildings as sometimes wildlife is unwanted, and oftentimes their presence is only noticed when they reach a critical stage of breeding, when disturbance from people is most harmful. Such conflict can usually be avoided without negative impacts to homeowners or wildlife. Modern buildings can also be improved for wildlife by making small changes to existing buildings or creating space for wildlife in new builds.

House Martin: Builds a mud-nest in the apex of the roof



Common Pipistrelle: Roost in the attic space



Herring Gull: Nests on flat roof tops or even on large chimneys



Swift: Nests in small gaps and under the eaves



Starling: Nests within the fascia, or any cavity



Expect the unexpected

Wildlife tends not to follow the rules. We have listed the usual suspects that use certain types of buildings, but wherever there are opportunities, wildlife will take advantage, and this can often bring surprises. Check out this Kestrel nest, where the birds chose to nest in a window box, with a view directly into the kitchen!



Which wildlife use buildings?

Here we take a closer look at some of the birds and mammals that are associated with or dependent on buildings in Ireland, to learn more about their behaviour and to identify their presence in buildings. There are so many species that use buildings in Ireland, that it is not possible to focus on them all individually. However, familiarity with the different wildlife that can occur in buildings, coupled with an awareness of their presence, will help to ensure that we avoid disturbance, appropriately plan changes to buildings, and identify opportunities for wildlife in new-builds.

Birds in buildings

Many birds have been recorded nesting in different types of buildings in Ireland, including: Herring Gull, Peregrine Falcon, Kestrel, Chough, Raven, Jackdaw, Woodpigeon, Stock Dove, Song Thrush, Mistle Thrush, Blackbird, Wren, Robin, Spotted Flycatcher, Barn Swallow, House Martin, Sand Martin, Swift, Pied Wagtail, Grey Wagtail, Starling, Blue Tit, Great Tit, House Sparrow and Tree Sparrow.



Swifts can reach speeds of up to 110 km per hour. They spend most of their life in flight; drinking, feeding, mating and even sleeping in the air

Swift *Gabhlán Gaoithe*

Status

Summer visitor throughout Ireland from May to early September. Population is declining.



Description

Similar in size to a Swallow, but all dark except for a small, white chin-patch. In flight, they have a distinctive shape; resembling a boomerang, with scythe shaped wings and short tail. One of the fastest flying birds in Ireland. They feed on invertebrates, which are caught in flight. Their call is a loud, piercing scream, often given by pairs or in screaming parties in high-speed chases.

Breeding and buildings

Buildings are the most common and important nest sites used by Swift in Ireland. Swifts nest in small crevices, as well as in the eaves of houses. Use occupied buildings in urban areas, towns and villages, as well as derelict buildings, including ruined stone structures. They nest in colonies, and are site faithful, which means they return to the same building each summer. They can use holes in trees or caves in uplands or coastal areas, but this is rare in Ireland.

When do they use buildings?

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
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■ breeding ■ absent

Barn Owl *Scréachóg Reilige*



Status

Scarce resident; still present in every county, but more common in the south, south-west and midlands.

Description

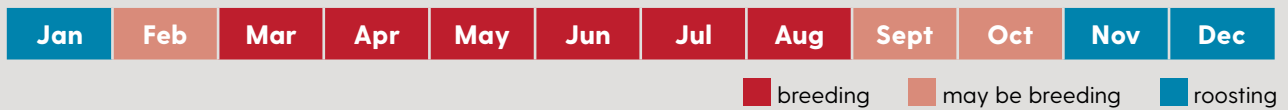
A medium-sized owl, with almost pure-white undersides and honey-combed upperparts, a pronounced heart-shaped facial disc and dark eyes. Their slow and wavering “moth-like” hunting flight is almost completely silent, which helps to conceal their presence and allows them to detect the subtle rustlings of small mammals in the undergrowth. They mainly feed on small mammals such as rats, mice, voles and shrews, but birds and occasionally frogs may also be taken.

Breeding and buildings

Will use any building that provides a dry cavity with a suitable base on which to nest. Often nest within the chimney (some nests being more than 30ft down a chimney) or roof space, and use ruined stone structures, farmhouses and sometimes occupied buildings. They are typically site-faithful and some buildings have been used by breeding Barn Owls for many decades. They increasingly use special nest boxes, many of which are located in farm buildings. Also use mature trees with hollow cavities, and quarries.

When do they use buildings?

Barn Owls have one of the most extended nesting seasons of our breeding birds. They can also have two broods. The timing of breeding varies; though the peak is between March and August, pairs can breed as early as February and can still have young in the nest into October.



Strange sounds in the night

Barn Owls use an extensive range of twitters, chirrups, hisses, squeaks and clicks to communicate, to establish pair bonds and to warn off predators - but it is their impressive screeches and snores that we are most likely to hear. Both adults emit a long and far-carrying screech, particularly in the lead up to or during the nesting season. Owlets and females also ‘snore’. This can be described as a ‘hissing’ sound that resembles a rough, wheezy intake of breath. These strange sounds have given rise to the legend of the Banshee, and tales of haunted houses. However they are also one of the best ways of determining the presence of Barn Owls in an area.



The ‘snoring’ reaches fever pitch when an adult arrives at the nest with prey for the young



House Martin *Gabhlán Binne*



Status

Summer visitor throughout Ireland from mid-March to late-September.



Description

Similar in size to Sand Martin and Swallow, but with a large white rump and shallow forked tail. Upper parts glossy blue-black, with white underparts. Feeds on insects such as aphids and mayflies caught in flight.

Breeding and buildings

Predominantly nest on buildings. Regularly use occupied buildings in rural, suburban and urban areas. Constructs a dome-shaped mud nest, usually underneath the eaves of a house. Nest colonially and are easily seen. Usually raises two or three broods, with some fledging as late as September and even into October.

When do they use buildings?



Swallow *Fáinleog*



Status

Widespread and common summer visitor throughout Ireland from mid-March to late-September.



Description

Similar to House Martin, but with red face-patch and long tail-streamers. Upper parts glossy dark blue, with creamy-buff under-parts. Feeds on insects caught in flight. Very vocal. Their song, consisting of several musical, twittering notes followed by a short buzz, can be frequently heard.

Breeding and buildings

Predominantly nest in buildings, including farm buildings such as barns and sheds, as well as garages; even if there is only a small entrance into the building. Can nest in busy farmyards and buildings.

When do they use buildings?



Swallow nest in a building which is frequently used by people



Starling *Druid*



Status

Common resident throughout Ireland. One of Ireland's top 20 most widespread garden birds.

Description

Slightly smaller than a thrush. Short tail and pointed wings, with pink legs. Plumage appears dark but has iridescent green and purple tones in summer. Bill is yellow in summer and dark in winter. Feed on invertebrates, fruit, cereals and seeds. Also scavenge on refuse and scraps, and along shorelines. Emits a great variety of calls. Will imitate other bird calls, including Curlew and crow, and other sounds - even car alarms and chainsaws!

Breeding and buildings

Breeds in holes or crevices in buildings (including under roof-tiles and fascia boards) in occupied houses, as well as cavities in trees.

When do they use buildings?



Spotted Flycatcher *Cuilire Liath*



Status

A widespread summer visitor from May to September.

Description

Slightly larger than a Robin. The head, back, wings and tail are grey, while the undersides are white and streaked with grey. When perched they have a distinctive long-tailed, large-headed shape. Have favourite perches from which they make short darting, agile flights to catch insects on the wing.

Breeding and buildings

Build a nest of small twigs and moss lined with feathers or hair in small holes, gaps or crevices in buildings, or in ivy against a wall. Often use old stone farm buildings and courtyards; also regularly use cavities in trees, and open-fronted nest boxes.

When do they use buildings?



Spotted Flycatcher nest in ivy surrounding the wall of a building



Jackdaw Cág

Status

Resident, widespread and common.



Description

A small species of crow. All dark-grey plumage with a lighter nape and neck-side, which contrasts with a blackish forehead. Have a uniform grey under-wing, black legs and a dark bill. Intelligent, like all crows, and social in nature; often seen in pairs. Noisy birds, often calling to one another. They feed on a wide variety of foods including invertebrates, fruit, seeds, carrion, small vertebrates and birds' eggs.

Breeding and buildings

Cavity-nesting species; regularly use buildings. Build a stick-nest in chimneys and other cavities, and nest colonially. Many pairs can nest in close proximity. Also use hollow cavities in trees, coastal cliffs and quarries.

When do they use buildings?

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sept

Oct

Nov

Dec

■ breeding ■ roosting

Building in a building

Jackdaws build stick-nests in cavities and holes in buildings. Each spring, more nest material is brought in and added to existing stick-nests, which can result in substantial piles of sticks in some buildings. As Jackdaws fill available holes and cavities with nest material, they create nesting opportunities for other species. Barn Owls, for example, don't construct a nest, and can only use chimneys which have been blocked by Jackdaws. Most Barn Owl nests in chimneys are on top of old Jackdaw nests.



Jackdaw nest material has blocked the chimney of an abandoned farmhouse and has gathered at the fireplace

On the rise

The breeding population of Peregrine in Ireland is continuing to recover after a period of extensive declines during the 1950s and 1960s, which was primarily due to secondary poisoning by organochlorine pesticides. Increasingly, breeding Peregrine use buildings, including large, ruined structures, churches and high-rise buildings in towns and cities. Although such structures in the heart of city centres may seem vastly different to remote coastal cliffs and rocky outcrops in upland areas traditionally used by Peregrine, these buildings provide suitable and undisturbed nesting sites. Peregrine may also benefit from the availability of prey which are associated with urban centres.



Peregrine are one of the fastest animals on the planet. They hunt and catch other birds in flight

Kestrel *Pocaire Gaoithe*



Status

Resident and widespread; one of our most common birds of prey. Declining.



Description

A small species of falcon with long, relatively narrow wings and tail, and short, hooked bill. Male and female Kestrels have different plumages: males have a blue-grey, finely streaked head, upper-tail and rump, while females have brown-streaked plumage, with a series of bands on the brown upper-tail. Their name in Irish translates as 'the wind puncher' which describes their hovering behaviour when hunting. Feed mostly on small mammals and birds, as well as frogs, lizards, and invertebrates.

Breeding and buildings

Nest in ruined and stone structures, where they make a scrape on a sheltered ledge. Also use a range of other nest sites, including the stick-nests of other species, trees, tree cavities, coastal cliffs, quarries and nest boxes.

When do they use buildings?



Herring Gull *Faoileán Scadán*



Status

Resident on all Irish coasts. Population declining, although numbers in some coastal urban areas have increased.



Description

A large gull, adult plumage is white with light-grey upper-wings and black wing-tips. Have pink legs and a heavy yellow bill, which has an orange spot. Immature birds are brown with finely patterned feathers, and can be difficult to tell apart from immatures of Lesser and Greater Black-back Gulls. As opportunistic predators and scavengers, they follow fishing boats, use landfill sites, and scavenge scraps in urban areas.

Breeding and buildings

Their use of buildings in coastal urban areas is increasing, particularly in Dublin, but also in other coastal cities and towns. They typically nest on flat roof-tops and even chimneys. Several pairs can use the same building. Also breed in colonies around the coast of Ireland.

When do they use buildings?



Bats in buildings

Although eleven species of bat have been recorded in Ireland, nine species are confirmed to be resident – all of which use buildings. These are:

- | | | |
|-------------------------|---------------------------|-------------------|
| 1. Common Pipistrelle | 4. Lesser Horseshoe Bat | 7. Leisler's Bat |
| 2. Soprano Pipistrelle | 5. Daubenton's Bat | 8. Natterer's Bat |
| 3. Brown Long-eared Bat | 6. Nathusius' Pipistrelle | 9. Whiskered Bat |

Bats are usually seasonal visitors to buildings, but most types of building are used at different times of year. Between mid-March and September, breeding female bats form maternity roosts to give birth and raise their pups. Most bats choose buildings as maternity roosts to take advantage of warm locations, including occupied buildings. In winter, bats enter torpor (hibernation) and need quiet, undisturbed roosts of relatively constant temperature. Cellars, crevices, chimneys and roof spaces of abandoned buildings are commonly used. Bats can also use roosts in buildings as 'transition roosts', between summer breeding and winter hibernation, or 'night roosts', in which to rest between feeding periods.

Bat of the aristocracy

The Lesser Horseshoe Bat is known as the 'bat of the aristocracy,' as they roost in old, historic ruins. They can't crawl into crevices and tight spaces like other bat species, so have to be able to fly into roost spaces. They are the only bat species in Ireland which hang upside down, with their wings wrapped around their body.



Lesser Horseshoe Bat *Crú-ialtóg Beag*

Status

Range limited to six counties along the west coast (Mayo, Galway, Clare, Limerick, Kerry and Cork). The population is thought to be increasing. Inadequate Conservation Status (NPWS Habitats Directive Reporting, 2019).

Description

They have a distinctive 'nose-leaf,' comprised of folds of skin around their nostrils, which forms a horseshoe shape. The only Irish species to hang upside down from its feet, with wings wrapped around its body. Forage in woodland, scrub and along hedgerows for insects such as midges, moths, caddisflies and craneflies, caught in the air or from vegetation.

Breeding and buildings

Form maternity roosts in the roof spaces of buildings such as old houses, stables, and outhouses in summer. Rarely use occupied buildings. In winter, they hibernate in cellars of old ruins, as well as caves, mines and souterrains.

When do they use buildings?



Common Pipistrelle *Ialtóg Fheascrach*

Status

Our most common bat; widespread. Favourable Conservation Status (NPWS Habitats Directive Reporting, 2019).



Description

The Common Pipistrelle, along with the similar-sized Soprano Pipistrelle, are the two smallest bat species in the country - both weigh no more than a €1 coin. They have brown fur on the body, and black skin on the ears and face, which appears mask-like. Most likely to be seen flying soon after dusk in both urban and rural areas. They have a fast, twisting flight; hunt insects (such as midges, mosquitoes, small moths) in the air. May consume up to 3,000 insects in one night.

Breeding and buildings

This species, along with the Soprano Pipistrelle, are the species most likely to use occupied buildings as maternity roosts. Tend to occupy crevices, rather than open attic spaces, in a variety of modern and old structures.

When do they use buildings?



What did you call me?

Like all Irish bats, Brown Long-eared Bats use echolocation to hunt, by emitting high-frequency calls which allow them to locate their prey. Their calls are very quiet, but are easily picked-up by their sensitive ears. They tuck their large ears under their wings to protect them during hibernation!



Brown Long-eared Bat *Ialtóg Fhad-chluasach*

Status

Widespread. Favourable Conservation Status (NPWS Habitats Directive Reporting, 2019).

Description

They have highly distinctive large ears, which are nearly the same length as their body. They have long fur which grades from greyish-brown to yellowish brown on their upper sides, with buff-coloured fur on their undersides, and pink faces. Forage for insects amongst foliage.

Breeding and buildings

Roost in large attic spaces, outbuildings and churches, as well as holes in trees.

When do they use buildings?



Pine Marten *Cat Crainn*



Status

Once rare; is now widespread. The population is increasing after a period of significant declines due to loss of habitat, hunting and poisoning.

Description

A member of the weasel family, they are similar in size to a cat. Have a rich brown coat and cream-coloured bib, a long tail, rounded ears and a broad, flat forehead with a pointed face. They are mostly nocturnal and arboreal, as their name in Irish, which translates as 'tree cat', implies. Omnivorous; feed on small mammals, frogs, birds, eggs, insects and fruit.

Breeding and buildings

Breeding female Pine Martens sometimes den in buildings. Pine Martens can use attic spaces of abandoned houses and holiday homes. Occasionally use occupied buildings where access allows; also use tree cavities, rock crevices, burrows, nests, old squirrel dreys and log piles.

When do they use buildings?



Newer is not always better

The gaps, cavities, crevices and ledges which are a feature in the stonework of older buildings are such an important resource for wildlife. Newer buildings are typically devoid of such features. As new buildings replace older structures, this can reduce the availability of breeding and roosting sites for species such as Swift, Barn Owl and our bat species. It is really important that we protect these sites which are so important for wildlife. There is also a lot that we can do to make modern buildings more suitable for wildlife. In the following sections we explore how we can replicate some of these features in new buildings, to accommodate wildlife.



The aerial view of this castle shows the range of cavities and ledges available to wildlife

Record your sightings

Building up reliable information on the presence and distribution of wildlife is essential in ensuring their protection. You can help by reporting your sightings and information on wildlife breeding or roosting in buildings to the National Biodiversity Data Centre: www.biodiversityireland.ie



Small derelict cottages such as this one can host many different species of wildlife



Making changes to a building

Any modifications to existing buildings, such as renovations, restorations, conversions or demolition, have the potential to negatively affect wildlife. Planning permission is required for most structural alterations to buildings. Planning authorities are required to take account of the presence of protected species (Directive 2001/42/EC, the SEA Directive). Planning conditions or agreements may be used to ensure the conservation status of protected species is maintained. It is the responsibility of the developer, or those responsible for the building activities in question, to ensure that impacts on wildlife are appropriately recognised and mitigated. Small scale changes to buildings may be outside the remit of the planning system, but nonetheless have the potential to cause negative effects to wildlife. In all cases, regardless of the extent of works and the planning requirements, works need to be undertaken within the legal requirements.



Here, selective pointing is being carried out to facilitate maintenance of access points for bats and birds. Certain gaps can be left without interfering with the structural stability of the building

Leisler's Bat



The presence of wildlife in a building does not mean that works cannot be carried out. However, it does mean that careful consideration and planning is required to reduce the impact on any wildlife using the building. When planning a development, it is advisable to check for the presence of wildlife as early as possible so that any planning and licensing issues can be addressed before resources are committed. By following the steps outlined below, it is usually possible to plan and undertake works in a way that minimises impact to wildlife.



Careful removal of slates will ensure hibernating bats are discovered, and disturbance is minimised

1. Understand and adhere to the legislation

- Is a derogation licence required?
- Who is responsible?

2. Understand what wildlife is present and the potential effects

- Consult professionals

3. Plan works to minimise negative effects to wildlife

Take account of:

- Timing of works
- Retention of existing sites used by wildlife, where possible

4. Provide alternative sites if required

- Enhance existing features or build in space for wildlife
- Provide nest boxes, swift bricks, bat bricks etc.



How wildlife can be affected by modifications to buildings

With proper planning, changes to buildings can be made without significant negative consequences for wildlife. However, in cases where there is a lack of understanding of legal requirements and/or a lack of surveys to identify wildlife present, detrimental effects upon wildlife can and often do occur; examples of which are outlined below.

Wildlife in building	Works undertaken	Effects
Leisler's Bats roosting/hibernating in a small cavity in stone farm building	Restoration works including re-pointing carried out in November; no survey for bats was carried out	Roost is sealed with bats inside, bats die, roost is lost
Barn Owl nesting in chimney of derelict cottage	Cottage is demolished in August, without a survey for breeding birds	Young Barn Owls in nest are crushed when chimney collapses and nest is destroyed
Swift nesting under eaves of townhouse	Improvement works requiring scaffold erected around the building in July, but no survey for breeding birds was carried out prior to works	Adult Swift can't access nests due to scaffold and netting, young in nest starve



Barn Owl which was found within a demolished building

Case Study

Barn Owl nest in cottage which was being renovated

Barn Owls nested in the chimney of this cottage pictured, right), without the knowledge of the owner. Renovation works were carried out in June. Works included removal of the central chimney in which the owls were nesting. The Barn Owls were discovered during the works, but at that stage the nest had been rendered unsuitable. The site owner took immediate action, ceased works and contacted BirdWatch Ireland and the NPWS. An alternative nest site was prepared using existing materials available on site and in close proximity to the original nest. The three Barn Owl chicks, which were several weeks from fledging, were placed in the newly constructed nest site, which was monitored closely that night to ensure that the adults returned to feed the young. Works on the cottage were postponed until after the breeding season and all three Barn Owls fledged.



The Barn Owls were originally in the chimney. The new nest site is to the right of the chimney, in the top right of the image

Legislation

The Wildlife Acts 1976–2018 is the main Irish legislation protecting biodiversity. Almost all flora and fauna species, and the habitats in which they live and reproduce, are protected under these Acts.

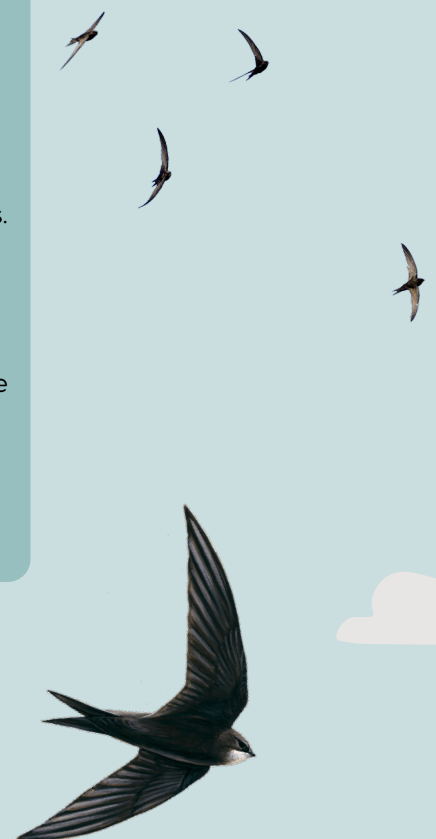
The European Communities (Birds and Natural Habitats) Regulations (2011–2015) transpose the EU Habitats Directive (92/43/EEC) and the EU Birds Directives (79/409/EEC) into Irish law. The EU Habitats Directive provides protection to threatened habitats, flora and fauna, including all bat species and their roosting sites in Ireland. The EU Birds Directive provides protection to all wild birds, their nests and eggs.

What does this mean for wildlife in buildings?

Breeding and resting places of protected wildlife are afforded protection under the Wildlife Acts and EU law. Therefore, disturbance to protected wildlife or their breeding/resting places may be an offence. If protected wildlife is discovered during works, activities must stop. For example, if a bat roost, bird's nest or Pine Marten breeding den is found during roof renovations, works should stop immediately to avoid committing an offence, and the advice of your local NPWS Conservation Ranger should be sought.

Key considerations for planning changes to a building

- Breeding and resting places of protected wildlife are afforded protection under the Wildlife Acts. Therefore, disturbance to wildlife or their breeding/resting places is an offence.
- A grant of planning permission does not constitute a licence or permission to disturb wildlife or interfere with their breeding or resting places.
- It is the responsibility of the developer and building owner to ensure that wildlife present, and any potential effects on wildlife, are taken into account, and that all works undertaken are within the legal requirements.
- If work is being undertaken on a building, and wildlife is discovered, a National Parks and Wildlife Service (NPWS) Conservation Ranger should be contacted immediately for advice.
- If works are to be carried out which could result in disturbance to wildlife (which may constitute an offence), a derogation licence is required from the NPWS (see below).
- If the proposed activity can be timed, organised and carried out so as to avoid committing offences, no licence is required.



What is a derogation licence?

An application may be made to the NPWS for a derogation licence to permit actions affecting wildlife or their breeding or resting sites that would normally be prohibited by law. The applicant must show that there is no satisfactory alternative and that the action will not adversely affect the conservation status of the species. If granted, a derogation licence may require mitigation measures. For example, destruction of a bat roost may only be facilitated if an alternative roost is provided.

When do I need a licence?

If the proposed activity can be timed, organised and carried out so as to avoid committing offences, a licence is not required. To ensure that no unlawful activities are undertaken, it is recommended that a licence/derogation is applied for if, on the basis of survey information, it appears that the site in question is used by protected species and that works would cause direct disturbance (e.g. disturbance to a female Pine Marten with kits), or would result in the loss of, or changes to a roost site for bats.

Case Study



Stone farm building repairs involving a Natterer's Bat roost, Co. Longford

During a bat survey (by ecologist Barbara McInerney) of an old stone farm building in Co. Longford, carried out prior to renovation works, numerous potential Natterer's Bat roost entrances were discovered. One of these was a cavity within the archway of a wall.

This arch required reconstruction. Therefore, to mitigate the potential loss of a bat roost and maintain the bats' entrance, a new chamber and entrance was included in the new wall. Throughout the building's restoration, the bats' needs were accommodated through use of bat tubes and bat bricks, inserted to replicate existing cavities.



How to tell if wildlife is present in a building



It is necessary to know if wildlife use a building in order to plan and mitigate for any changes to the site. An understanding of the species present, and the location of breeding or roosting sites, will inform any licence requirements - as well as the timing and scale of works - to ensure that activities are carried out within the legislation, and that disturbance to wildlife is avoided or minimised.

Many species that use buildings are discrete and difficult to detect. For example, bats and cavity-nesting birds are typically hidden from view. These species generally require specialist surveys to determine their presence. The type of building, the opportunities available for wildlife within the building, and the ease of inspection for the presence of wildlife in the building should inform the survey requirements. For example, in a modern, open farm building, it may be possible to thoroughly inspect for the presence of wildlife. In contrast, an old stone farm building with an inaccessible loft space and a range of opportunities for different species is likely to be more difficult to inspect for wildlife. Complex structures such as this are more important for wildlife, and their presence in such buildings is more likely to go undetected. Therefore, in buildings where wildlife may be present, but it is not possible to determine their presence, it is strongly recommended to seek expert advice or specialist surveys at the outset of planning the works.

When should I seek advice and/or specialist surveys?

Examples of sites where advice and/or specialist surveys are required to inform works include:

- a building which is suspected, or has potential, to be used as a roost by bats (at any time of the year)
- a building which is suspected, or has potential, to be used by protected wildlife (e.g. birds, bats, Pine Marten) for breeding and where the works may affect the species present during their breeding period.

Who can I seek advice from?

National Parks and Wildlife Service (NPWS): The NPWS is the Government's statutory nature conservation advisor and can advise on licence requirements, and in some cases on survey requirements and provide site-specific advice on wildlife in buildings.

A local authority **Heritage Officer** may also be able to provide guidance. Other organisations which may be able to provide advice on wildlife in buildings include: **Bat Conservation Ireland** (bats), **Vincent Wildlife Trust** (Lesser Horseshoe Bat and Pine Marten) and **BirdWatch Ireland** (birds).

An **ecological consultant** is required to perform a specialist survey.



Signs that Barn Owls are using a building

Barn Owls' presence in a building can be difficult to detect. They are only active at night and are usually well concealed during the day. In buildings used by Barn Owls, there are usually signs which indicate their presence, such as the remains of small mammal prey, pellets, moulted feathers and whitewash droppings. However, depending on the nest location, signs may not be obvious. The 'snoring' calls made by young Barn Owls at night in mid to late summer provides one of the best indications that they are present and nesting.

Spot the owl. Barn Owls nested in the roof space of this new building. There were no signs to indicate their presence. They would have been overlooked were it not for a specialist survey which confirmed their presence from their 'snoring' calls at dusk.

Signs that Swifts are using a building

Swifts nest in small cavities and crevices and the nest itself will not be directly visible. Their presence in a building is usually most obvious from birds flying at the height of the building, screaming, and flying up to and entering suitable cavities. They are usually most active in the morning and evening, and long periods can pass (particularly in unsuitable weather) when Swifts may not be obvious.



Some tips for identifying the presence of birds in a building

- ✔ Look out for regular activity; birds entering and exiting a building during the breeding season (typically March to August)
- ✔ Breeding behaviour (courtship, display, copulation) associated with a building
- ✔ Signs in or around the building (nest material, droppings, egg shells, food remains)
- ✔ Birds carrying nest material or food to a potential nest in a building
- ✔ Defence behaviour (alarm calling, mobbing) in vicinity of building
- ✔ Adults or young calling in the building
- ✔ Nests of some species will be visible (e.g. House Martin)
- ✔ Droppings under cavities and perches
- ✘ Never approach or disturb breeding birds or their nests

Some tips for identifying the presence of bats in a building

- ✔ Bats flying in and out of the building indicates the presence of a roost
- ✔ Bat droppings under windows, walls, sills and roost spaces
- ✔ Bat droppings crumble to dust when touched, unlike rodent droppings
- ✔ Bats can leave moth wings and insect remains beneath roosts
- ✔ Bat roosts can be associated with a slight ammonia-like smell
- ✔ Chattering noises from bats may be heard at dusk and dawn, or throughout the day during warm weather
- ✔ Lesser Horseshoe bats are visible when they roost, as they hang upside down in the open; other Irish bat species are unlikely to be visible because they tend to tuck themselves away from view
- ✘ Do not disturb bats, or cause any disturbance to bat roosts

Signs that bats are using a building

Bats can roost in many different parts of a building, including in between broken tiles, ridge tiles, roof joists, roofing felt, wood cladding, within the fascia board, the soffit, the eaves and in the attic space. Droppings are sometimes obvious under roost sites.

A hole **this size** is all bats need to access a roost



Lesser Horseshoe Bats roosting in an open roof space may be visible, whereas other species may be hidden from view

Bat droppings can accumulate under roosts and may be obvious



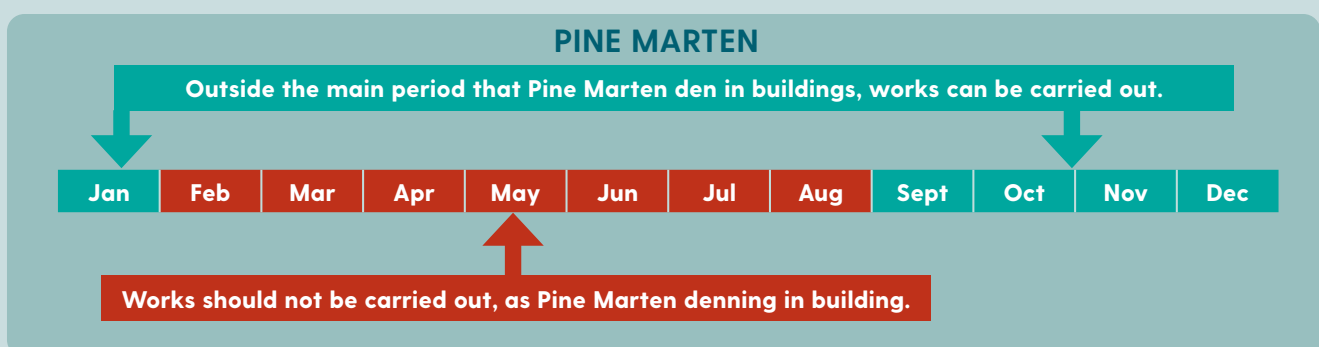
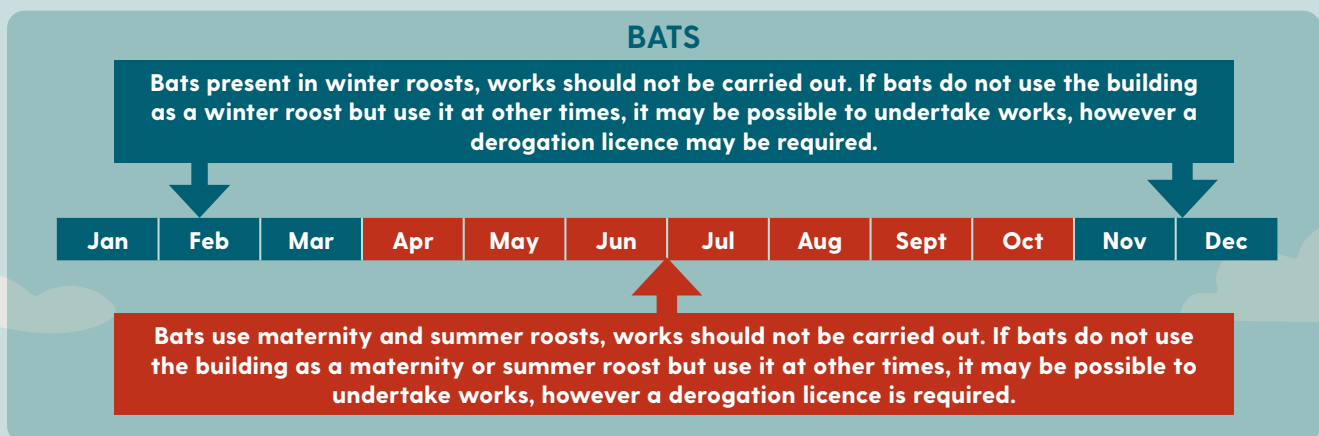
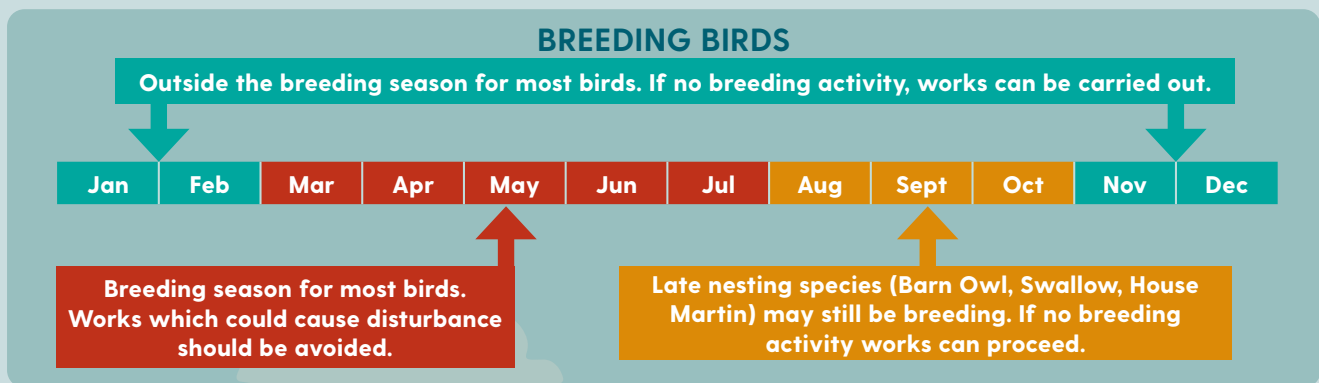
Planning works on a building with wildlife

It is possible in many cases to undertake works on a building used by wildlife without negative disturbance or impacts to species present. This can only be done with due consideration to the legal requirements, and with an understanding of the species present (see above). Planning the timing of works to avoid disturbance, and ensuring that important features of the building are retained for wildlife, are both essential to reduce direct and long-term impacts.

Timing of works

Wildlife generally use buildings for breeding in the spring and summer months, and roosting in the autumn and winter. All wildlife is sensitive to disturbance when breeding, and bats are also sensitive when roosting and during hibernation. Therefore, works which have the potential to cause disturbance should not be carried out during sensitive periods. These include breeding periods, and the winter period if the building in question supports over-wintering bats. If it can be confirmed that wildlife is not present in a building, works can be carried out at any time.

We have provided guidelines below on the main periods of breeding and roosting for wildlife which use buildings. The timing of breeding can vary, and it is essential to ensure that works on the building are planned based on the site-specific conditions.



Retaining breeding and roosting sites

Changes to buildings which are carried out and timed appropriately should not cause disturbance or direct negative effects to wildlife. However, changes to buildings may result in the loss or reduced suitability of breeding and roosting sites. Works should aim to retain breeding and roosting areas and access to these sites where possible. This will minimise the impacts to wildlife and allow continued use of the building after the works are completed.

Key considerations for maintaining the suitability of buildings for wildlife

- ✓ Map breeding and roost locations prior to works
- ✓ Map access points to breeding and roost locations prior to works
- ✓ Maintain breeding and roost locations where possible
- ✓ Maintain access points wherever possible
- ✓ Create additional opportunities for wildlife (for example, additional crevices/entrances, or nest/bat boxes) where applicable
- ✓ Consult with NPWS and/or a suitably qualified ecologist where mitigation is necessary
- ✗ Don't interfere with entrances to nesting/roosting sites, or the sites themselves, if they are being used by wildlife
- ✗ Don't destroy, cover or remove an entrance used by wildlife unless absolutely necessary. Only do this when wildlife are not occupying the site affected
- ✗ Don't carry out works which may interfere with a bat roost unless operating under a derogation licence

Case Study

Flahive's Lodge and Lesser Horseshoe Roost, Glengarriff Nature Reserve, Co. Cork

Flahive's Lodge at Glengarriff Woods Nature Reserve, Co. Cork, functions as an office for NPWS staff. Prior to renovation works carried out during the winter of 2006, the building was derelict. Lesser Horseshoe Bats roosted in the roof space which was accessed through a broken window. The renovation works included improvements to the building for bats, and numbers of Lesser Horseshoe Bats have gradually increased, from fewer than 12 prior to the renovation works, to 300 in the summer of 2019.

The renovation works included a standard roof construction, with slates (a good material for maintaining a relatively warm temperature), a new access point, sheeted plywood on the floor under where the bats roost (to allow easy clean-up of droppings) and an extra-well insulated attic to eliminate noise (so that humans don't disturb the roosting bats, and the bats don't disturb the working humans!).



Avoiding conflict with wildlife

Most wildlife which use buildings do so without issue and often without the knowledge of the inhabitants or building owner. However, in certain circumstances, the presence of wildlife in a building is undesirable and can cause problems. Wildlife in a building can give rise to issues of hygiene, noise, smell and sometimes structural damage, and some species can behave aggressively when breeding. In most cases, conflict between people and wildlife can be resolved or prevented. However, this requires an understanding of the problem and related legislation, and oftentimes requires expert advice.



The occupation of a building by wildlife is usually seasonal and temporary. Exclusion of wildlife from areas where their presence is problematic is often the most effective solution. Exclusion measures can only be implemented when there is no potential to harm or disturb breeding wildlife and roosting bats (see information on legislation). In some cases, exclusion can be straightforward (e.g. blocking an entry point to a building); in others it may be more complex (e.g. specialised netting) and require professionals. In all cases, advice should be sought from NPWS before proceeding with any actions which could cause disturbance.

In certain circumstances a derogation licence can be granted for the removal or control of wildlife, such as in situations of overriding public interest and safety (see information on derogation licences). For example, if a bat roost exists within a roof which requires immediate repair to mitigate a hazard for people occupying the building in question, the works may be facilitated under a derogation licence.

Herring Gull

The Herring Gull population has declined significantly, however, there has been an increase in birds nesting in urban areas; particularly coastal towns and cities. This is likely due to reduced feeding opportunities in their natural habitats along the coast. Conflict between Herring Gulls and people does occur, mostly in July, which is when the chicks are just starting to leave the nest. Adult gulls will vigorously defend their chicks from a perceived threat, which is often humans. As with most conflicts with wildlife, we are responsible. With some changes in behaviour, we can find a solution. Effective exclusion implemented outside the breeding season is usually successful in preventing Herring Gulls from nesting in problem areas and allows us to live together without conflict.



Herring Gull with young on an urban roof-top

Pine Marten

Due to the scarcity of natural denning sites in woodlands, Pine Martens are increasingly using buildings because they offer good insulation and protection against bad weather and predators. Pine Martens can also be attracted to bins or outbuildings in search of food. The presence of a female marten and her kits in a building can give rise to problems of smell and hygiene, and possibly also structural damage. Due to the risk of a female marten abandoning her kits if disturbed, no action should be taken to exclude or deter a Pine Marten from a building without first contacting the NPWS. Any action to remove the martens without first consulting your local ranger could constitute an offence under the Wildlife Acts. For further information and advice, visit pinemarten.ie.



Pine Marten kit in attic space



Case Study

Urban office and Herring Gulls, Co. Dublin

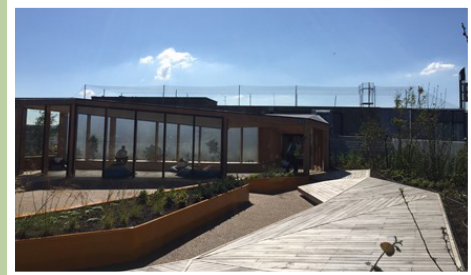
Wildlife Management Services specialise in providing effective and humane solutions to wildlife and human conflicts. They are regularly contacted for advice on deterring roof-nesting Herring Gulls, particularly in Dublin City. Typically, business and building owners contact them once the gulls have already started nesting; however, the best time to address a problem concerning gulls is before their presence becomes an issue.

Workday, a company on May Lane, Co. Dublin, identified a potential hazard relating to Herring Gulls and took appropriate steps to prevent problems. During the development of a rooftop amenity area for their staff, Workday recognised that the area would likely be attractive to gulls. They contacted Wildlife Management Services in advance of the nesting season, prior to opening the rooftop area.

A specialist tensioned bird proof net was installed over the perimeter area of the rooftop garden to restrict access and prevent gulls from nesting. The garden itself is regularly used by staff, which naturally discourages gulls from nesting. Workday have left a separate section of flat roof (which is located away from the garden) free from gull-proofing, and the gulls nest here without issues.



Netting to exclude Herring Gulls



The rooftop garden at Workday fitted with netting to exclude nesting Herring Gulls



A natural solution to a natural problem

Nest boxes have been installed on buildings in Dublin City centre by Wildlife Management Services to encourage Peregrine Falcon to breed, with the secondary aim of deterring Herring Gull from using these same buildings.



Improving buildings for wildlife

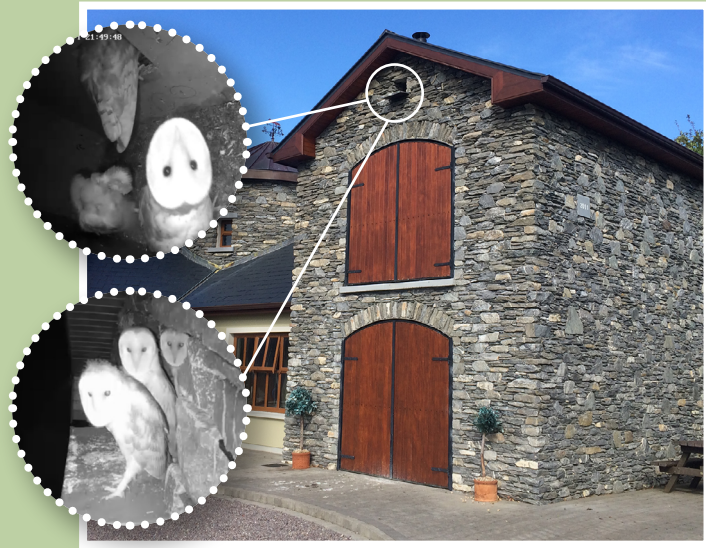
Renovation and repair works can result in the loss of important sites for wildlife. Retaining existing breeding/roosting sites used by wildlife will result in the least disturbance to wildlife. However, if a breeding or roosting site must be lost as part of repair works, it is often possible to provide alternative sites tailored to the species affected.

The wildlife-value of existing buildings can also be improved, by creating new breeding places within or on the building. When designing new-builds, it may be possible to include accommodation for wildlife within the structure of the building.

Case Study

Accommodating Barn Owls in a new building

On first glance, this building in Co. Kerry may not appear to be suitable for Barn Owl. It certainly looks very different to the derelict buildings more commonly used by breeding Barn Owl. However, Barn Owls have nested here successfully for several years, thanks to the purpose-built nesting space which was included in the design. Several nest cameras within and outside the nest allow the residents an intimate insight into the lives of their nearest neighbours.



Providing alternative sites

If replacing breeding/roosting places as part of building works, it's best to include these sites within the building, at or adjacent to the original site (depending on the requirements of the species). If existing wildlife sites are to be lost or altered, it is important to provide alternative sites well in advance of works. Incorporate alternative sites designed for wildlife affected into the renovation plans where needed. Most cavity-nesting bird species will use specialised nest-boxes, and all bat species except Lesser Horseshoe Bat will use bat-boxes. The **Useful Resources** section of this booklet provides links to resources which provide information on the breeding and roosting requirements of species associated with buildings, as well as information on the design and construction of boxes. In cases where it isn't possible to accommodate sites for wildlife within the building in question, bird and bat boxes can be installed on the outside of the building, or on nearby trees or structures. Pine Marten den boxes should be installed at a distance from the building, on a suitable tree. Each species has unique requirements, but with the right advice, it should be possible to accommodate the wildlife in question.



Case Study

Creating space for Swifts

Dermot Doran had never observed Swifts from his house in north Kildare before he installed external nest boxes with a caller system (under licence) in 2014. He observed Swifts investigating the nest boxes for the first time in the summer of 2016. In 2020, he had attracted eight pairs which nested in the boxes.

The sound of screaming Swifts is now something he looks forward to each summer, and with special nest cameras fitted inside the nest boxes he is able to view the Swifts' nesting activity over the course of the breeding season. This shows how simple measures can be taken to provide benefits for wildlife, in a way which allows us to appreciate it from the comfort of our own homes!



Swift boxes at Dermot Doran's house in Johnstown, Co. Kildare

Swift boxes installed at build stage provide suitable nest sites in this new building



This Barn Owl nest box fitted to the exterior wall of this church provides a safe and secure nest site.



Useful Resources

National Parks and Wildlife Service

Wildlife legislation: <https://www.npws.ie/legislation>

Derogation licences: <https://www.npws.ie/licences/disturbance>

Contact NPWS or your local ranger: <https://www.npws.ie/contact-us>
or LoCall 1890 383 000 (from Republic of Ireland only)

Information on birds in buildings and bird boxes

BirdWatch Ireland: <https://birdwatchireland.ie/>

Barn Owls: https://www.dublinczoo.ie/wp-content/uploads/2020/01/Barn-Owl-information-and-conservation-advice-booklet-_For-Web.pdf

Barn Owl video: <https://www.youtube.com/watch?v=YESLEPyNPK8&t=251s>

The Barn Owl Trust (UK): <https://www.barnowltrust.org.uk/>

Swifts: <http://www.swiftconservation.ie/wp-content/uploads/2019/06/Saving-Swifts-Guide-by-BWI-2019.pdf>

Swift video: <https://www.youtube.com/watch?v=Z5YzYJcJWfM>

Information on bats in buildings and bat boxes

Bat Mitigation Guidelines (NPWS): <https://www.npws.ie/sites/default/files/publications/pdf/IWM25.pdf>

Bat Conservation Ireland: <https://www.batconservationireland.org/>

Vincent Wildlife Trust: https://www.vincentwildlife.ie/download_category/bats

The Heritage Council: <https://www.heritagecouncil.ie/publications?q=bat>

Information on Pine Marten in buildings and den boxes:

Vincent Wildlife Trust & NPWS: <https://pinemarten.ie/>

ADVICE AND ASSISTANCE FOR EXCLUDING WILDLIFE FROM BUILDINGS:

Wildlife Management Services: <http://www.wildlifemanagement.ie/>

TRADITIONAL FARM BUILDINGS GRANT SCHEME:

Heritage Council: <https://www.heritagecouncil.ie/projects/traditional-farm-buildings-grant-scheme>

RECORDING WILDLIFE SIGHTINGS:

National Biodiversity Data Centre: <http://www.biodiversityireland.ie/>

REPORT WILDLIFE CRIME:

National Parks and Wildlife Service: www.npws.ie/contact-us

Wildlife Crime Ireland: <http://www.wildlifecrime.ie/>

REPORT INJURED AND SICK WILDLIFE:

Irish Wildlife Matters: <http://www.irishwildlifematters.ie/animals/contacts.html>



BirdWatch Ireland

BirdWatch Ireland is the largest independent conservation organisation in Ireland. Established in 1968, it currently has over 15,000 members and supporters and a local network of over 25 branches nationwide.

The primary objective of **BirdWatch Ireland** is the protection of wild birds and their habitats in Ireland. To fulfil these objectives, we:

- Carry out extensive research and survey work.
- Operate conservation projects for some of Ireland's most threatened bird species and habitats.
- Manage a network of nature reserves nationwide.
- Advocate for the conservation of wild birds, their habitats and other biodiversity nationally and internationally.
- Recruit, retain and service a growing membership base.
- Build on existing partnerships with other non-governmental environmental organisations, with Government departments, the European Commission and farming organisations, and work to establish new partnerships with other sectors.
- Raise awareness and promote the value and importance of wild birds and biodiversity.

There are lots of ways to get involved with **BirdWatch Ireland** so that you can enjoy Ireland's wild birds and help us to protect birds and biodiversity.

To join **BirdWatch Ireland** as an individual, family, school or key member, contact us at www.birdwatchireland.ie or call us (01) 281 9878.

Local Authority Heritage Officers

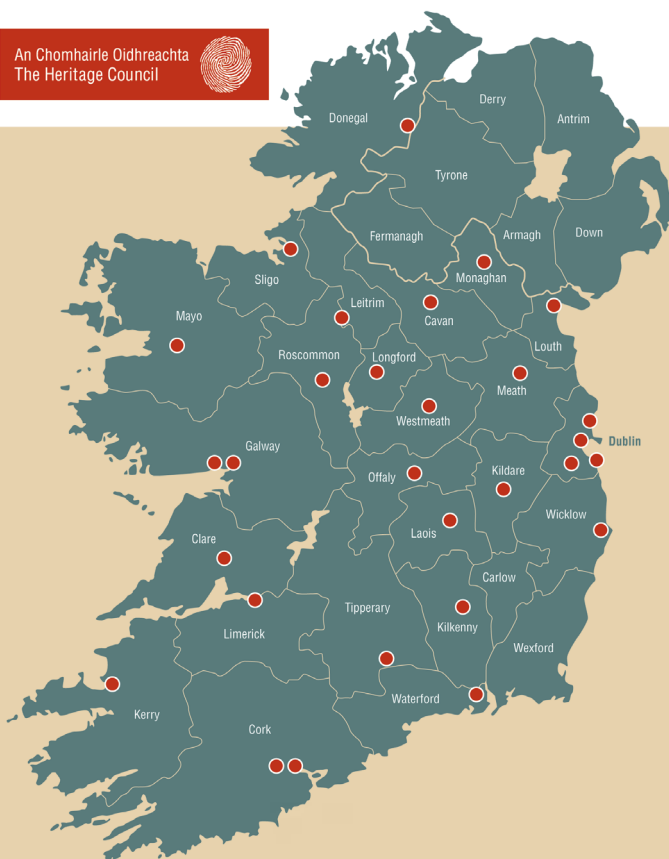
An Chomhairle Oidhreachta
The Heritage Council



Local Authority Heritage Officers work within most local authorities across Ireland. With the support of the Heritage Council, Heritage Officers play a key role in promoting heritage awareness, developing policy and providing advice and information on local as well as national heritage issues.

To contact your local Heritage Officer, see <https://www.heritagecouncil.ie/our-work-with-others/county-heritage-officers>

An Chomhairle Oidhreachta
The Heritage Council



Local Authority Heritage Officer Network

● Location of Heritage Officers

Cavan	Longford
Cork City	Louth
Cork County	Mayo
Clare	Meath
Donegal	Monaghan
Dublin City	Offaly
Dun Laoghaire/ Rathdown	Roscommon
Fingal	Sligo
Galway City	South Dublin County
Galway County	Tipperary
Kerry	Waterford
Kildare	Westmeath
Kilkenny	Wicklow
Laois	
Leitrim	
Limerick	



Heritage Officer Programme





BirdWatch Ireland

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