



Irish farms and the lesser horseshoe bat

Practical steps you can take to conserve
the lesser horseshoe bat

Background to the lesser horseshoe bat – Ireland’s rural bat

The lesser horseshoe bat is one of our smallest bats, weighing just 4-9g. It can be identified by a horseshoe-shaped flap of skin around its nose and at rest it hangs upside down, often with its wings wrapped around its body. Its Irish name is *laltóg crushrónach*.

This delicate bat with its butterfly-like flight suffered a widespread decline in Europe during the 20th century, but is now showing signs of recovery. However, because this bat depends on roosting sites that are both scarce and under threat from disturbance or development, it needs your help to survive.



The lesser horseshoe bat

In Ireland, the lesser horseshoe bat is a bat of the western Atlantic seaboard, currently found only in Mayo, Galway, Clare, Limerick, Cork and Kerry.

Roost sites

The summer roosts of this bat are usually in old, undisturbed buildings. It prefers large entrances that allow uninterrupted flight into the building. Once inside, horseshoe bats hang in darkened areas. In winter, lesser horseshoe bats hibernate in caves, mines, cellars, tunnels or ice houses.

Food and feeding

The lesser horseshoe bat emerges at dusk and flies along hedgerows, tree-lines and stone walls to reach their hunting areas, which are usually within two kilometres of their roost. They forage all through the night, catching insects in flight or picking them off foliage.

Breeding

The single baby is born in June or July and is six weeks old before it leaves the roost to feed on insects. Infant mortality can sometimes be very high and populations may take many years to recover from adverse events such as severe winters.

How the lesser horseshoe bat uses your farm buildings

Roosting

Maternity or nursery roosts are usually occupied from April to September. The female bats and their young will cluster in the darkest and warmest section of the building, where it can be hard to see them. Their droppings resemble small mouse droppings that crumble to a fine powder when crushed.



Shed used as maternity roost



Deserted cottage used in autumn as a transition roost

Not all buildings are used as maternity roosts. Some, known as transition roosts, are used by the bats only in spring, prior to giving birth, and again in autumn, before they enter hibernation.

In addition to the buildings used by day, lesser horseshoe bats make extensive use of a wide range of structures during the night. These structures are known as night roosts and can be sheds, garages, porches or a range of farm outbuildings. Night roosts are often close to or within the main foraging area for a maternity colony and may enable the bats to rest between feeding periods.



Outbuilding in centre of photograph is a night roost

How the lesser horseshoe bat uses your farmland

Hunting

This bat hunts in deciduous woodland, scrub, amongst mature trees, along field margins and hedgerows, and along edges of woodland. In winter, this bat feeds on insects associated with the dung of grazing cattle, so grazed pasture near hibernation sites is very important for bats that arouse from hibernation. It is also very important that there are connections between these areas so that bats can find them.



Hunting bat in woodland

Flying

The lesser horseshoe bat has evolved a highly specialised echolocation system perfectly adapted for flying in cluttered environments - such as within woodland and scrub.

However, their system is not as successful when navigating in open spaces - such as over large fields or hedgerows with gaps. As a result, this species closely follows intact linear features, mainly hedgerows and stone walls.



A tree-line flight route

How to improve your farm for horseshoe bats

Many of the actions needed to enhance the value of your farm to bats are familiar to farmers and will be of most benefit within a radius of 2km of a roost. However, some of the measures needed to enhance buildings require

quite detailed explanation. The steps suggested here are those that can be easily undertaken. If additional work is considered, please contact your local NPWS conservation ranger or contact the Irish VWT office.

Where possible

To provide bats with shelter when flying and insects when feeding:

- Allow some hedgerows to grow wide and tall
- Cut sections of hedges on a rotational basis
- Infill gaps of more than five metres in hedgerows, tree-lines and stone walls
- Extensively graze unimproved areas of the farm
- Reduce the use of pesticide and herbicide sprays

To provide bats with roosting places on your farm:

- Provide square openings (50 x 50cm) into farm buildings to allow the bats in
- Keep predators, such as cats, out of buildings used by the bats
- Board up some windows and doors to allow heat to build up and to keep light out
- Plant vegetation near the buildings to provide the bats with shelter when flying
- Direct security lights away from areas on the farm that could be used by the bats
- Grille or fence off entrances to underground sites and plant some shelter
- Keep disturbance at roosts to a minimum

The benefits of having bats on your farm

Bats are extremely beneficial animals to have on your farm because they consume millions of insects each year, including the swarms of biting midges and mosquitoes we endure each summer. As natural predators of night flying insects, bats help to reduce the need for and cost of chemical control. Because of their complex life cycle and low reproduction rate, all Irish bats are protected by national and international legislation.

It is an offence to:

- intentionally disturb
- intentionally kill or injure a bat or
- to damage its resting place.

Therefore, before work at or near a bat roost is carried out, please seek advice from National Parks and Wildlife Service (NPWS).

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www.heritagecouncil.ie

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An Chomhairle Oidhreachta
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