

Barn Owl Buildings Survey

Site: MOANMORE, Co. Clare

Barn Owl Buildings Survey, 18th April 2023

The Buildings Survey purpose was to examine all buildings within 1km of the proposed site of the wind farm for signs of the presence of Barn Owls.

The buildings Survey was conducted on 18th April 2023 from 0810 to 1315. Weather was sunny with light south-easterly winds F3-4, dry throughout.

Searches were made where possible in all suitable and accessible buildings, for signs of the presence of Barn Owls - moulted feathers, pellets, or whitewash, in accordance with survey guidelines issued by T.I.I. and BirdWatch Ireland (BirdWatch Ireland, 2021).

The habitat within the 1km radius study area was dominated largely by improved grassland (cattle, sheep), with extensive low hedgerow and scattered mature trees. There was also an extensive area of cutover bog to the NW of the study area, and several large conifer plantations, of varying ages, particularly on the N of the area.

There were no waterways of note, with just some small drainage ditches.

Results

The results of the Buildings Survey is shown in Map 1.

An active Barn Owl site was found Site 01, in the centre of the study area at Carnaun, Grid Ref. IQ 98322 57475 (Lat:52.659200, Long: -9.5035842). Here there was a large stone barn with a partially collapsed roof, and an associated derelict cottage. Six Barn Owl pellets were found below beams in the shed, and extensive 'white-wash' was found below this area, indicating a frequent perch, or roost, for a Barn Owl. The pellets were about 2-4 months old.

The shed had no suitable nesting cavities, though the cottage had two chimneys, one of which looked suitable as a potential nest site (the other overgrown with vegetation). There were no signs of 'whitewash' on or below the chimneys, and no pellets on the ground beneath (although this in itself does not rule out the use of the chimney as a potential nest site). The cottage was boarded up, so no internal inspection was possible.

At all other sites examined in the study area, there were no signs of the presence of Barn Owls. These were of two derelict cottages (one under some renovation) and a metal-roofed Barn.

Other species

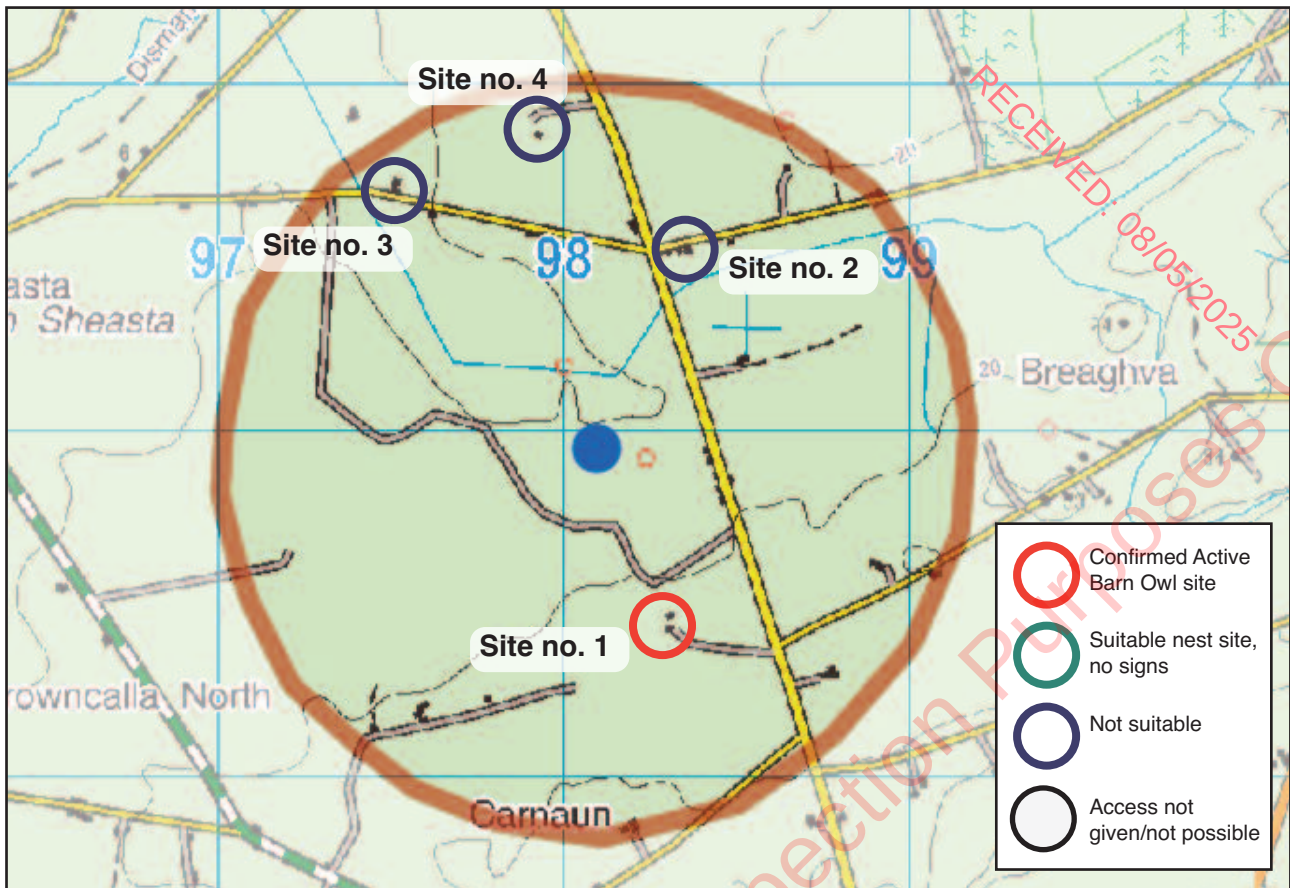
Other observations of note were the presence of a hunting Kestrel on the N of the study area, though



Site 1. The ruined stone barn, where Barn Owl pellets were found



Site 1. Inside the ruined stone barn, with extensive 'whitewash' on the beams, showing a regular Barn Owl perch, or roost.



Map 1. Location of the active Barn Owl Site no. 1. Sites 2, 3 and 4 - respectively a metal-roofed shed and two derelict cottages - were considered unsuitable for Barn Owls, and there were no signs of their presence.

there was no Kestrel pellets or feathers found at any of the sites, and no indication of Kestrels nesting nearby.

Recommendations

Site 1 would require a dusk or nighttime visit to confirm or otherwise the presence of nesting Barn Owls, to be undertaken during a second visit in late May/early June.

Michael O'Clery, 15th May 2023

Reference

BirdWatch Ireland, 2021. *Survey and Mitigation Standards for Barn Owls to inform the Planning, Construction and Operation of National Road Projects*. PE-ENV-07005. TII Publications, April 2021. <https://www.tiipublications.ie/library/PE-ENV-07005-01.pdf>



Site 1. Derelict cottage associated with the derelict stone shed.



Site 1. Barn Owl pellets and whitewash below the beams of the derelict stone shed.



Site 1. Derelict cottage associated with the large, derelict stone shed, with at least one chimney shaft (on the left) which could potentially be a nest site.



Site 3. Derelict cottage undergoing renovation. Chimney blocked at the top, so unsuitable for nesting Barn Owls.

Barn Owl Buildings Survey

Site: MOANMORE, Co. Clare – 2nd visit

Barn Owl Buildings Survey, 13th June 2023

A second visit was made to confirm the presence or otherwise of nesting Barn Owls at Site no. 1, a derelict stone barn and adjacent cottage, which had been identified as both a potentially suitable nest site, and an active Barn Owl site during the first daytime survey visit on 18th April 2023. On that visit, six Barn Owl pellets and 'whitewash' were found in the stone barn (see First Visit, above). No other suitable sites were detected within the study area on the first visit.

As some Barn Owl nest sites can be deep within wall cavities or in disused chimney systems, their presence may not always be detected by daytime visits. Second visits, made at dusk or night time, can reveal the presence of birds as they emerge and begin to hunt, or engage in display, courtship or other behaviour, often in the immediate vicinity of any potential nest.

Observing the behaviour of adult Barn Owls and their vocalisations at night can establish the breeding status of any adults present, and if chicks are also present, their vocalisations (generally only made at dusk or night) can also be detected and interpreted to establish an approximate stage of development. From that

information, approximate egg-laying and fledging dates can also be inferred, and further action and recommendations undertaken, if necessary.

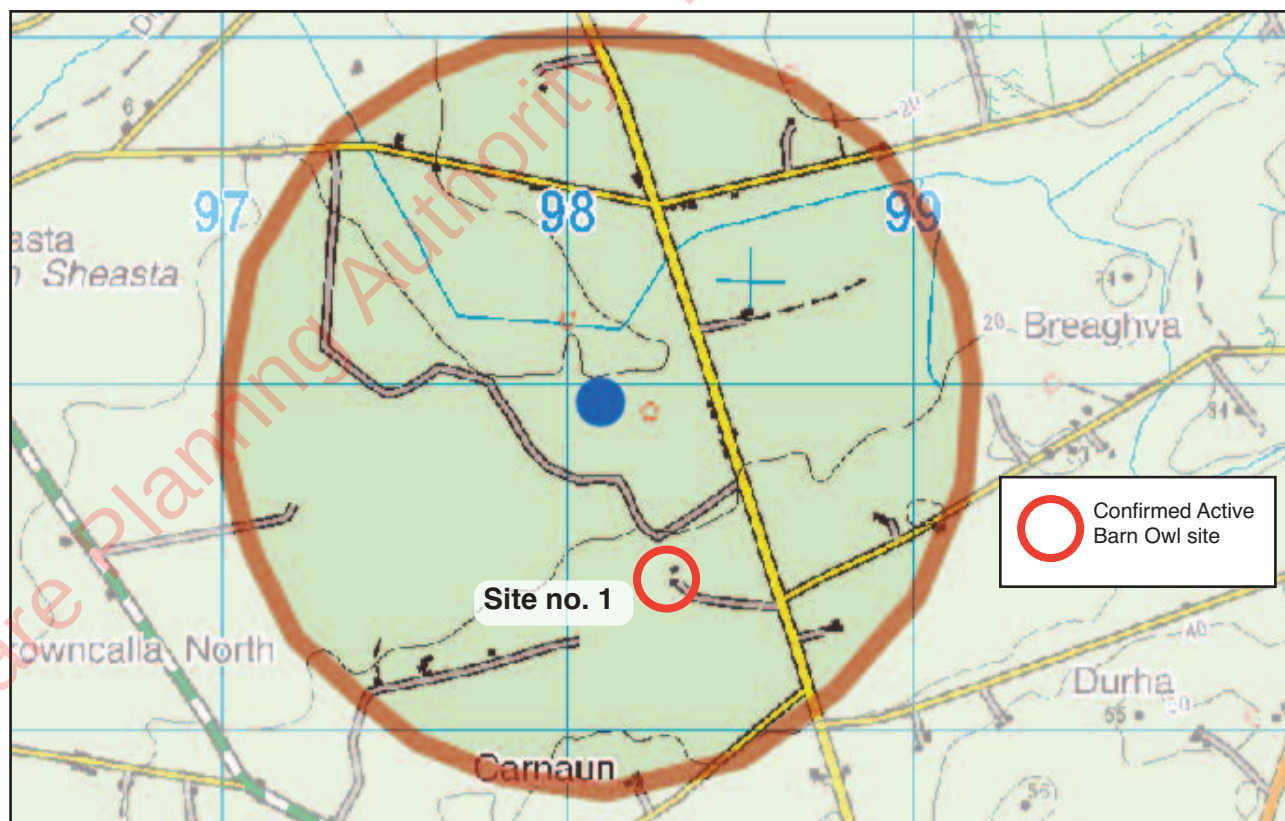
The second visit was carried out between 21:20 and 00:15 on the night of 13th/14th June 2023. Weather was warm, calm and clear, wind N F2, 4/8 cloud, 19 degrees celsius. Sunset was at 22:03.

The survey visit was made in accordance with survey guidelines issued by T.I.I. and BirdWatch Ireland (BirdWatch Ireland, 2021). The site was approached carefully and quietly on foot, and an initial search was made of the stone barn to check whether there were any fresh signs of Barn Owl pellets or 'whitewash' (the Barn Owl pellets had been removed from the area on the first visit to allow for the detection of fresh ones). Observation of the site then continued from 22:00 for 2 hours.

A thermal imaging camera – an Axion 2 LRF – was used during the survey work.

Results

See Map 2 below, for the location of the site visited.



Map 1. Location of the active Barn Owl Site no.1 which was revisited at night on 13th June 2023.

No sightings or vocalisations of Barn Owls were detected at the site or nearby.

No fresh pellets or 'whitewash' was detected in the stone barn prior to the observation period, and none were present in or around the adjacent cottage. There were no fresh signs of 'whitewash' on the cottage chimneys, or elsewhere at the site.

No Barn Owl activity or vocalisation was detected throughout the second survey visit.

Although the presence of Barn Owls was detected at the site on the first visit on 18th April 2023 (6 pellets and 'whitewash'), there were no fresh signs of the presence of Barn Owls detected during the second visit, and no nocturnal activity was detected on or close to the site.

The pellets examined from the site from 18th April were aged as 1-3 months old, judging by the colour and texture (see Barn Owl Trust, 2012). This would imply the presence of Barn Owl(s) at some time in January to March 2023. The small number of pellets involved (6) would also imply that the site was only occasionally used within that timeframe as a roost site. March would be considered as just outside the nesting period (April to August) (Lusby & O'Clery, 2014), therefore it would be appropriate to classify this site as an active winter roost.

Recommendations

Barn Owls are not nesting at the site at Moanmore, though the site is an active winter roost site, and a possible future nest site. It would be recommended to further survey the site before and during any future construction, renovation or other disturbance in the immediate vicinity of the stone shed and adjacent cottage. Provision of a Barn Owl nest box in the stone shed should also be considered.

Michael O'Clery, 29th June 2023

References

Barn Owl Trust, 2012. *Barn Owl Conservation Handbook:*

A Comprehensive Guide for Ecologists, Surveyors, Land Managers and Ornithologists (Conservation Handbooks). Pelagic Publishing.

BirdWatch Ireland, 2021. *Survey and Mitigation Standards for Barn Owls to inform the Planning, Construction and Operation of National Road Projects.* PE-ENV-07005. TII Publications, April 2021. <https://www.tiipublications.ie/library/PE-ENV-07005-01.pdf>

J.Lusby & M.O'Clery, 2014. *Barn Owls in Ireland. Information on the ecology of Barn Owls and their conservation in Ireland.* BirdWatch Ireland.