



Ulster Wildlife Barn Owl Survey 2014



Introduction

On the whole 2014 has been a good year for barn owls in Britain and Ireland, with successful fledging being reported throughout. The Barn Owl Trust and Colin Shawyer from the Barn Owl Conservation Network (BOCN) produced reports in the summer which concluded many birds bred early and had larger than normal broods, in fact both organisations were receiving reports of second broods such was the success. Birdwatch Ireland has reported a similarly successful year in the Republic of Ireland. After an appalling breeding year in 2013 this is welcome news; many of us are aware of the close correlation between a mild winter and dry summer and the success of barn owls. It seems the national trend was reflected in Northern Ireland. Of the two active nest sites we are aware of and monitor, at least 4 chicks fledged in Loughgall and 1, possibly 2 chicks fledged from the Crumlin site.

Methodology

Prior to the 2014 barn owl survey, a suitable methodology was developed with advice and input from the BOCN. With feedback from surveyors the methodology will continue to be refined to better reflect the behavioural and ecological nuances of the barn owl in a Northern Irish context. Five workshops took place across Northern Ireland with the aim of teaching attendees how to survey for barn owls. Skills taught included how to identify signs of barn owl presence, survey buildings and the wider countryside for barn owl presence, and assess potential nesting and foraging habitat from aerial maps and line of sight. 38 survey tetrads (2 x 2km squares) [Fig. 1] were selected based on barn owl sightings reported to Ulster Wildlife by the general public (200 sightings to date in 2014) [Fig. 2], this figure also includes verified sightings from the survey effort and from speaking to landowners.

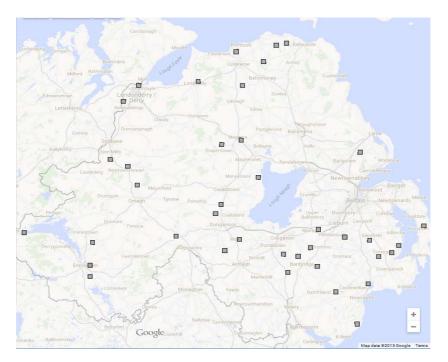


Figure1 Barn Owl Survey 2014 survey tetrads







Figure 2 Barn owl sightings reported to Ulster Wildlife in 2014.

Over 70 volunteer surveyors signed up to take part & were asked to travel through their assigned tetrad speaking to local residents & landowners about barn owls. With landowner's permission, surveyors also checked any buildings or trees with potential to be nest or roost sites. Surveyors checked for evidence of barn owls only and due to the time of the year the survey was carried out there was little risk of disturbance to breeding barn owls, however training was given on how best to avoid disturbance at the workshops.

Results

The surveyors spent an estimated 1750 hours on fieldwork (averaging a staggering 25 hours each) covering 82% of the tetrads and 124km². Of the 31 tetrads surveyed 13 were found to have potential nest sites which can be revisited next year. From the survey we have at least 24 new landowners who are interested in working with us to increase foraging habitat for barn owls and erect nest boxes. We conservatively estimate from surveyor reports that 15 people were spoken to or given information in each tetrad, meaning we engaged with an incredible 465 people about barn owls throughout the survey. This is incredibly important as the public are the major source of sightings of this rather elusive bird. As such it is important that awareness remains high to encourage the recognition of sightings and possible nest or roost site signs across the country.





The survey also produced (from surveyors confirming sightings with local people & finding potential nest sites) a number of areas which will warrant closer inspection under licence during the breeding season in 2015. It is hoped that this more targeted effort at a time when the birds tend to be more visible (and noisy!) will yield nest sites where the 2014 survey did not. Through engaging with local people we increased our knowledge of historical (once occupied but now inactive) nest sites to 12 **[Fig. 3]**; it is well known that historic sites remain attractive to barn owls decades after the original occupants have gone. As such these sites will form an important part of our strategy in 2015 to attract barn owls back to these nest sites with appropriate management.



Figure 3 Historical nest sites known to Ulster Wildlife (house icon), and sites that need further survey (purple icon).

Many of our surveyors have also identified suitable sites across the country where barn owl boxes could be placed. We have a policy of only providing barn owl boxes around barn owl hotspots and have a number of measures that need to be met before we will provide a barn owl box for erection. A map of barn owl boxes erected or those that we know have been erected can be found below **[Fig 4]**.





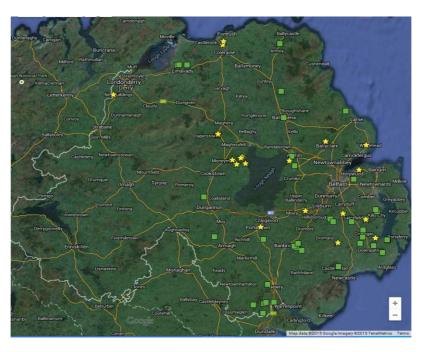


Figure 4 Barn owl nest boxes erected by or known by Ulster Wildlife (green squares) & nest boxes requested (yellow stars).

Throughout the barn owl survey we received reports of long-eared owl nest sites and sightings as a result of the survey effort **[Fig. 5]**. Though not the target species, this data is incredibly important in order to ensure that the sites remain protected for breeding pairs across the country. Please continue to include this data in future reports, as without it we are unable to fight potential damaging planning applications or actions by the public in general. We are also interested in the breeding success of these sites as we find them so for those of you lucky enough to have a site please do get in touch and let us know!



Figure 5 Long eared owl reports to Ulster Wildlife (sightings in red, nest sites in green).





The success of the barn owl survey this year was entirely down to the dedication of over 70 survey volunteers, to whom we are extremely grateful. Keep up the great work and look out for our barn owl workshops and thank you events in the coming year!

Upcoming work before the 2015 survey

Another of our volunteers, Sofia, is working on producing a map of NI with a 'traffic light' system that will allow us to traffic light swathes of Northern Ireland. That being red; not suitable for barn owls, amber; may be suitable for barn owls, or green; suitable for barn owls. This map will be based on information such as elevation, habitat suitability, presence of major roads & coniferous woodland and others factors that influence barn owl distribution. This will help us make decisions on where effort should be put into landowner engagement and advice and nest box erection. For example it is known that the majority of barn owls nest sites are under 150 metres above sea level, which excludes 25% of Northern Ireland's land area. A new agri-environment scheme is due to open in 2015. It is hoped that we can engage with more landowners in areas where we know barn owls are present and encourage them to take up options that will benefit barn owls. Where we feel suitable habitat has been created or is present we will work with landowners to erect nest boxes where we feel it is appropriate.

With the project focus moving to County L'Derry for its second year, we will be working with local volunteers and organisations to offer advisory visits to landowners and aim to erect a nest box in 1/3 civil parishes within the county using the historic nest sites that we are now aware of and using sightings and suitable habitat. We are creating a new volunteer role asking for help to put up nest boxes from members of the public such as tree surgeons who have suitable qualifications for tree climbing.

We will provide further training for interested volunteers to investigate areas which were shown to have potential for breeding barn owls during the 2014 survey. This work will be carried out prior to the 2015 survey and will be under licence from NIEA.

If you would like to help the barn owl in Northern Ireland there a number of ways you can. We are looking for qualified tree climbers to help us raise barn owl nest boxes across the country, you can volunteer for the 2015 barn owl survey, further details can be found at <u>www.ulsterwildlife.org/barnowl</u>.

