



GUIDANCE DOCUMENT FOR THE BARN OWL NEST BOX ACTION



Prepared for the Department of Agriculture, Food and the Marine

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INTRODUCTION

This guidance document sets out all the information required on the Barn Owl Nest Box Action, in order to: 1) determine whether your farm is suitable for this action, and 2) provide the practical information necessary to implement this action according to the specification and to ensure benefits for Barn Owls and other biodiversity on your farm.

The Barn Owl is one of Ireland's most recognisable and admired birds. Known as the 'farmers friend', it has long been closely linked with farming practices in Ireland, and traditionally nested in old stone farm buildings, often within the farmyard. However, it is a species which has struggled in recent decades and, due to widespread declines in their population and range, it is a Red-listed Bird of Conservation Concern in Ireland. The decline of the Barn Owl in Ireland has been driven by several factors, such as land use changes, the intensification of farming which has caused the loss of suitable habitat, the loss of nest sites (such as old stone farm buildings) and the increased use of rodenticides (rat poisons). Despite this decline, we know that Barn Owls and other wildlife respond well when we address these issues and provide suitable conditions for them on farms, which is the objective of this action. To learn more watch this video on Barn Owls in Ireland.

The Barn Owl has responded well to the provision of nest boxes in Ireland. BirdWatch Ireland has recorded over 100 nest boxes used by Barn Owls for breeding, and this number is increasing each year. These nest boxes provide safe and secure sites replicating the cavities that Barn Owls require for nesting. The majority of these nest boxes are on farmland, and many are in farmyards. As well as benefitting Barn Owls, encouraging Barn Owls onto your farm will also have benefits for you. Barn Owls are one of the best means of natural rodent control. A pair of Barn Owls can catch over 20 rodents in a single night during the breeding season (hence their name 'the farmers friend'). This short video on Farming with Barn Owls shows the benefits of having Barn Owls on your farm.



Derelict buildings provide nesting opportunities for Barn Owls which typically use cavities such as chimneys. Where there are few ruined buildings in the countryside, providing nest boxes can help Barn Owls (Images: John Lusby)

Nest boxes need to be appropriately located, to provide benefits for Barn Owls. It is important to note that <u>not all farms will be suitable for this action.</u> Nest boxes which are poorly located or of the wrong design can negatively impact Barn Owls.

The most important considerations are: 1) the nest box is placed in a suitable location and is of the appropriate design and dimensions; 2) there is suitable habitat for Barn Owls on your farm (see the guide to Barn Owl habitats in Ireland), and 3) appropriate rodent control measures are adopted to ensure the risk of secondary poisoning of Barn Owls is minimised.

This document goes through each of <u>these considerations in simple and concise steps and provides practical guidance videos on each topic.</u> The details as set out in the <u>specification must be followed.</u> This document also provides the additional information required to ensure this measure is implemented effectively, and where additional detail is deemed necessary for the successful implementation of this action. <u>Please take the time to review the three steps below before deciding to choose this action and before setting out to implement this action.</u>



Providing suitable foraging habitat in combination with providing nesting sites will deliver benefits for Barn Owl, while the habitat provision and creation measures will provide benefits for a range of other wildlife (Images: Paul Moore & John Lusby)

SITE SUITABILITY

Step 1: Is the Barn Owl Nest Box Action suitable for your farm?

The first and most important step is to determine if your farm is suitable and qualifies for this action. To do so, simply answer the questions in the chart below. Please also refer to Appendix 1. which shows the areas which are most suitable for Barn Owl based on the current distribution of the population. If your area or your farm is not suitable for a Barn Owl nest box it may be suitable for a Kestrel nest box and if so you can still choose this action. Information on Kestrel nest boxes is included in Appendix 4.

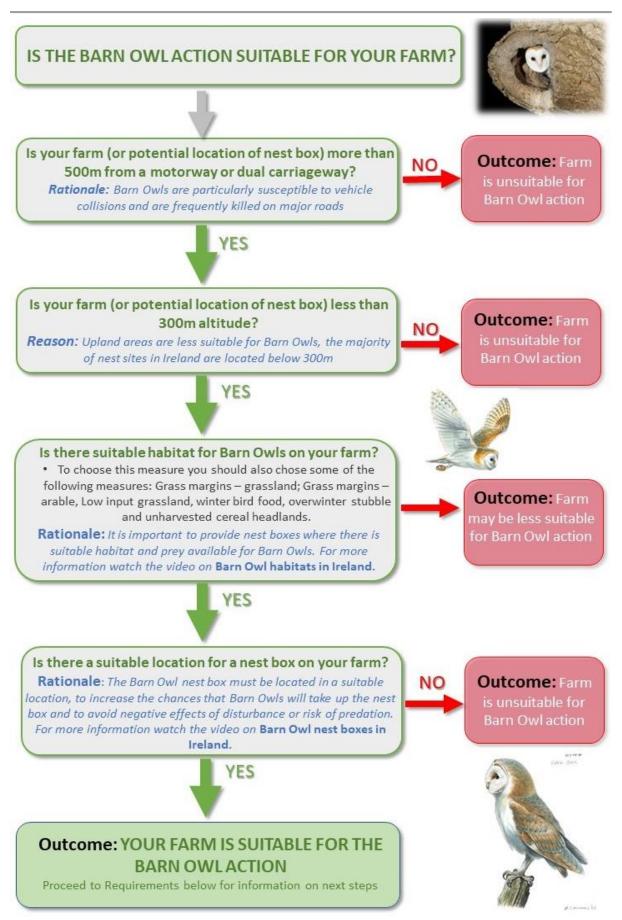


Figure 1. Flow chart to help decide whether your farm is suitable for the Barn Owl Nest Box Action (Barn Owl in tree cavity: Mike Brown; Barn Owl illustrations: Mike Langham (RSPB-Images.com).

REQUIREMENTS

Once you have determined that your farm is suitable for the Barn Owl Nest Box Action, the next step is to become familiar with the basic requirements of this action. These requirements relate to implementing an **Integrated Pest Management** approach on the farm to reduce the risk of secondary poisoning to Barn Owls and other wildlife and ensuring that **nest boxes are placed in the most suitable locations and are of the appropriate design and dimensions**, as required by the specification of this action. All the information you need is set out below.

Step 2: Rodent Control measures on your farm

Rodent control is an essential component of agriculture, however the way in which we control rodents can affect local wildlife. Rodenticides (rat poisons) are the most common means of achieving rodent control, however the use of these toxins is not sustainable and we now know that a wide range of wildlife are unintentionally exposed to and affected by rodenticides in Ireland. This can occur through primary poisoning (when a non-target animal directly consumes the bait), or secondary poisoning (when a predator or scavenger consumes an animal that has itself consumed rodenticides, as applies Barn Owls). The use of bait stations and covering bait does not eliminate the risk of exposure to wildlife. Please watch this short video on the risk of rodenticide exposure to wildlife in Ireland.



Barn Owls feed on rodents which is beneficial however this can result in secondary poisoning if the rodents and other prey have been contaminated by rodenticides (Image: Richard T Mills)

Step 2.1: Integrated Pest Management

To reduce the negative impacts and risk of exposure of rodenticides to Irish wildlife, this action requires an Integrated Pest Management approach to be adopted on the farm. Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. Effective long-term control of rodent activity is best achieved be making the site unattractive to rodents in the first place. This is done by **limiting access to food, water and shelter** and it means that you should be constantly maintaining conditions on your site which will deny rats and mice these basic supports, especially in and around farm

buildings. If after taking these measures, rodents continue to pose a problem in and around the farmyard, then biological control, using dogs, shooting, or mechanical control using traps need to be considered in the first instance (if control is required). Only if these control methods are attempted and prove unsuccessful, should rodenticides be used. The use of rodenticides must be justified by the presence of rodent activity and must be used according to the label. Under new rules for using AVK rodenticides the permanent application of baits can only be carried out by professionals who have received specific training.

Rodenticide treatment programme

If you have decided to use rodenticide you <u>must be sure that rodents are indeed present and pose a risk</u> and that <u>other methods of control have not been or are unlikely to be successful</u>. There are many brand formulations and active substances to consider and you should make an informed decision on which one to use in terms of palatability, success of uptake and the toxicity of the active substance. First remove all available food and water but leave the site otherwise undisturbed.

A rodenticide treatment programme consists of three parts

- 1. Proper application of bait as per the label instructions
- 2. Checking and replenishing baits as instructed by the label
- 3. Removal of all remaining surplus and spent bait

Rodent carcasses should be disposed of safely by farm incinerator, disposal in non-hazardous waste bin or burial 50cm or deeper away from sensitive areas.

The Campaign for Responsible Rodenticide Use Ireland has produced comprehensive guidance on best practice rodent control on farms. Please read the <u>'Effective control of rodents on farms'</u> and the CRRU Ireland <u>'Best Practice Requirements'</u>.

Requirement: A requirement of this action is to implement an Integrated Pest Management approach on your farm, and to maintain records of rodent control. A template form for rodent pest management records, is provided by the Campaign for Responsible Rodenticide Use here.

Birds of Conservation Concern in Ireland

The 'Birds of Conservation Concern in Ireland (BoCCI)' is a review jointly compiled by BirdWatch Ireland and RSPB NI to assess the conservation status of bird species in Ireland. The review uses a 'traffic light' system – Red (high conservation concern), Amber (medium conservation concern) and Green (low conservation concern) to determine the conservation status of all regularly occurring bird species. Of the 211 species assessed in the fourth and most recent BoCCI review, 54 (25.6%) are on the Red list, 79 (37.4%) on



the Amber list and 78 (37%) on the Green list. Barn Owl has been on the Red-list on all four BoCCI reviews due to the extensive declines in its breeding range. When grouped by habitat, farmland birds (35%) have the highest proportion of Red-listed species after upland birds (50%), which shows the current pressures on farmland bird populations. Kestrel is one species which was added to the Red-list in the most recent review and which is affected by similar pressures as Barn Owl, which include changes in land use and in farming practices, while it is possible that secondary poisoning of rodenticides has also affected their populations. Reversing the effects of agricultural intensification is essential to restore populations of farmland birds, including Barn Owl and Kestrel.

STEP 3: Providing a Barn Owl nest box on your farm

The video 'A guide to Barn Owl nest boxes' provides all the relevant information on Barn Owl nest boxes - selecting the right type of nest box (interior or exterior nest box), identifying the most suitable location to install the nest box, building the nest box, installing and maintaining the nest box.



A brood of Barn Owls in a nest box (Image: Nathy Gilligan)

Step 3.1: Selecting a suitable location for the Barn Owl nest box

Barn Owl nest boxes can be placed in an interior space (e.g. inside a quiet shed, barn or outbuilding) or exterior space (e.g. a tree or on the outside of a building). The location you choose will dictate whether the nest box is of interior or exterior design. Interior nest boxes must be placed in buildings that are dry and not exposed to the elements as these nest boxes are made of interior grade plywood and will not do well in wet conditions. Exterior nest boxes can be placed outdoors and are made of exterior grade marine plywood suitable to withstand the elements.

You should first assess if you have a suitable building on your land to place the Barn Owl nest box. In order for a building to be suitable, it should be quiet, but especially between February to August. A building which is used on a regular basis throughout the year is more suitable than a building that is used sporadically, as this may result in birds settling during a quiet period but then being disturbed when activity occurs. The nest box should be situated at least 3 metres off the ground and should not have easy access for predators (e.g. cats). Ensure that the nest box will not be blocked at any time during the year (for example if storing bales in the building). There must be permanently open and preferably large entrance/exits to the building.

If you don't have a suitable interior space for a nest box, then an exterior nest box can be placed on a suitable mature tree or on the outside of a building. The exterior nest box should be placed facing out onto open land, at least 4 meters off the ground, facing away from prevailing weather conditions (i.e. not south-west) and with clear flight lines to the nest box. Similar to the interior nest box, it should be situated in an area that is free from disturbance (e.g. a lot of human activity, machinery or sporadic loud noises). Ensure that the tree can support the weight of the nest box.



Examples of suitable locations for an interior Barn Owl nest box (Images: John Lusby, Michael O'Clery & Alan McCarthy)



Examples of suitable locations for an interior Barn Owl nest box (Images: John Lusby & Alan McCarthy)

Interior Nest Box

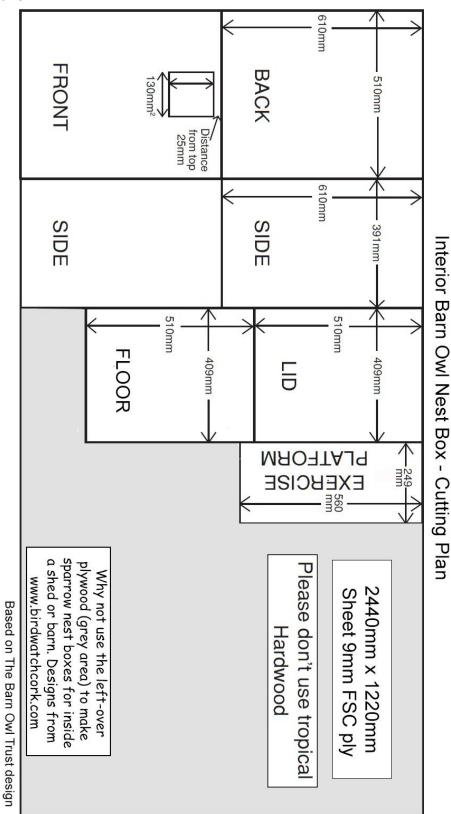


Figure 2. The cutting plan for an interior Barn Owl nest box

Materials:

- 1. One sheet of 9mm thick 2440x1220mm interior grade FSC approved plywood
- 2. Approx. 6000mm (6 metres) of 25x50mm wooden batten
- 3. 30mm, 40mm, and 50mm wood screws

Instructions:

- 1. Cut out plywood to dimensions as shown above (Figure 1). Use a jigsaw to cut out the entrance hole.
- 2. For the side panels, cut and secure battens as shown below. You should use 30mm screws for securing the plywood to the "flat side" of the batten. Note that the top cross-batten is 155mm down from the top of the side panel. Five equally spaced screws will suffice to secure each long vertical batten, while 2 or 3 screws will suffice for the short horizontal cross-battens.



The side panels of the interior nest box (Image: Alan McCarthy)

3. For the front and back panels of the box, cut and secure battens as shown in Figure 3 below. You should use three 40mm screws for securing the plywood to the "narrow side" of each batten. Also note that these battens are each 442mm in length.

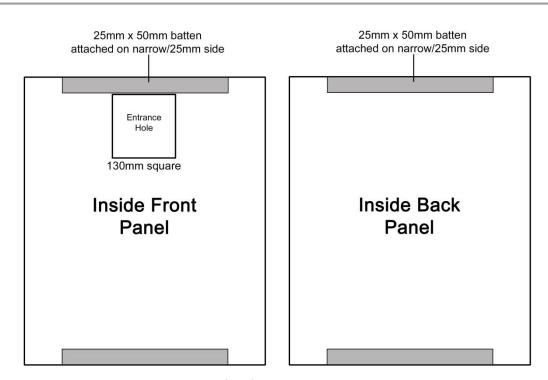


Figure 3. Inside view of the front and back panel with battens attached.

4. Use 40mm screws to secure the front and back panels to the side panels. Five screws placed equally along each edge should suffice. Ensure the screws screw through the battens that are attached to the side panels and not through the side panel plywood itself.



View of the bottom of the box (box is upside-down) before floor has been attached (Image: Alan McCarthy)

- 5. Screw on the floor panel of the box, using 30mm screws, again ensuring you are screwing into the battens. 4 screws along each edge will suffice.
- 6. Cut battens to make the exercise platform as shown below. 30mm screws will suffice for this. Note the long battens are approx. 650mm long and the battens sit on top of the plywood.



The exercise platform (Image: Alan McCarthy)

7. Fix the exercise platform to the nest box using 50mm screws (2 or 3 on each side is enough). Make sure to screw into the inner side cross-batten and not through the plywood alone. Screw x 2 30mm screws from the inside front of the box into the platform batten to prevent a gap opening between the front of the box and the platform over time.



View of box interior from the back of the box (Image: Alan McCarthy)

- 8. Finally make and fit the lid on the box (Figure 4). Using 40mm screws, secure approx. 285mm long battens along the side of the lid so that the battens (which are inset 9mm from the side of the plywood) slide snuggly between the side panels' vertical battens. The lid should be left unscrewed to make future monitoring and the emptying of the box easier, though ensure the lid isn't too loose that it risks being blown off.
- 9. A layer of wood chips, 2 or 3cm deep, can be put in the nest box if available, however this is not essential. Do not use sawdust or other such fine materials.

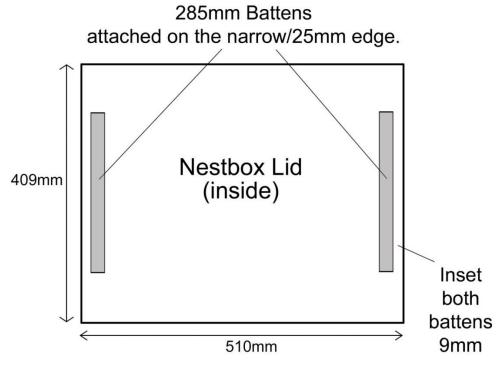


Figure 4. Inside of lid with battens.



The completed interior nest box (Image: Alan McCarthy)

Exterior nest box

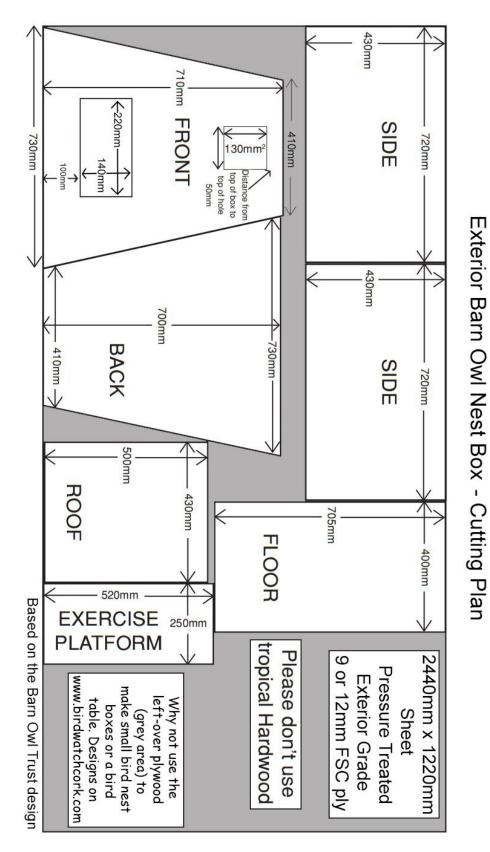


Figure 5. Cutting plan for exterior barn owl nest box

Materials:

- 1. One sheet of 9mm or 12mm thick 2440x1220mm **exterior grade** FSC approved plywood (can be either pressure treated or marine plywood)
- 2. Approx. 6000mm (6 metres) of 25x50mm treated wooden batten
- 3. Approx. 2000mm (2 metres) of 50x50mm treated wooded batten
- 4. 30mm, 40mm, 50mm, and 70mm wood screws
- 5. Thick roofing felt or torch-on roofing felt
- 6. Weatherproof wood glue
- 7. All weather sealant
- 8. 12mm felt nails
- 9. 50mm barrel door bolt, or similar

Instructions:

- 1. Cut out the plywood sheet as shown in Figure X above.
- 2. Use a jigsaw to cut out the entrance hole and inspection hatch.
- 3. Cut battens to fit the back of the nest box as shown on the next page in figures 9 and 10. Use 30mm screws for screwing into the "flat" side of the batten. Note the 50mm gap between the bottom of the plywood back and the bottom of the lower horizontal batten. 5 to 6 screws should suffice for securing the long horizontal (side) battens, 4 screws for the lower horizontal batten and 3 screws for the top horizontal batten.

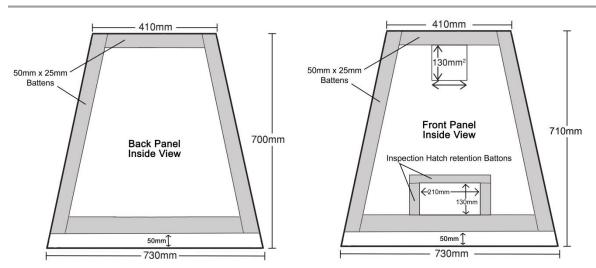


Figure 6. The inside view of the back panel and the front panel of the exterior nest box with measurements

- 4. Repeat with the front panel as shown above. Again note the 50mm gap at the bottom of the front panel. The battens around the inside edge of the inspection hatch will hold the inspection hatch door in place, preventing it from falling into the box and preventing rainwater seeping into the box. Therefore, these battens should overlap the inspection hatch hole by 5mm along each edge including the bottom edge. These interior hatch retention battens can be made from off-cuts of plywood or 25x50mm batten.
- 5. On the outside surface of the front panel, attach two short lengths of 25x50mm batten to the end of the box to hold the inspection hatch door in place. These should be cut at a 45 degree angle to prevent the inspection hatch door falling out. Use a bolt at the top of the inspection hatch to lock it closed (Figure 7).

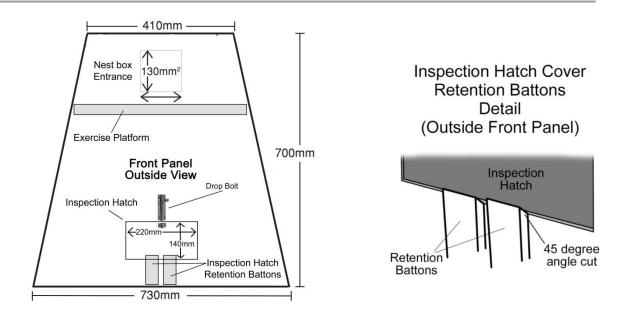


Figure 7. The view of the outside front panel of the exterior nest box with measurements

- 6. Before attaching the sides of the box to the front and back panels, apply weather sealant along the edges of the front/back panels, ideally along the plywood edge rather than the batten.
- 7. Using 40mm screws, screw one of the side panels to the back panel, making sure the screws go into the side edge of the batten on the back panel plywood. 5 or 6 screws placed equally along the edge should suffice.
- 8. Next, attach the front panel, however the front panel should be inset 100mm at the top and be flush at the bottom, as shown in Figure 8. This slope will help prevent rainwater getting in through the entrance hole. Repeat again with the other side panel.

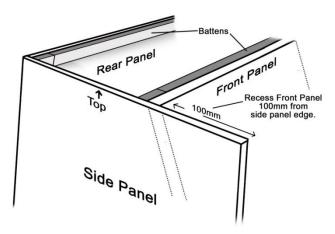


Figure 8. The recessed front panel of the exterior nest box

- 9. Smooth over excess sealant pushed out by compression. Ensure the joints between front/back and side panels are well sealed.
- 10. Fit the floor of the box using 50mm screws. 4 to 5 screws along the front and back should suffice. Again ensure you screw these into the lower horizontal battens. The floor will be inset a few centimetres from the ends of the front/back and side panels.
- 11. To attach a 1000mm back cross support batten for securing the box in a tree, predrill 3 small holes through the back panel of the box in a line approximately 200mm from the top of the back panel. Apply wood glue where the 50x50mm support batten will sit on the back of the box (Figure 9.). Secure this batten using 70mm screws screwed through the batten into the edges of the back panel (ensure these screw through into the inner vertical battens that are attached to the inside of the back panel). Screw x3 50mm screws from the inside of the box through the pre-drilled holes and into the batten. It is vital this batten is firmly secured to the box.

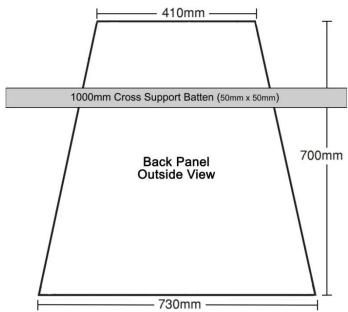


Figure 9. The outside back panel showing 50mm x 50mm cross support position

12. Screw on the lid using x3 40mm screws along the front and back of the box, again ensuring the screws go into the top horizontal battens.

13. Next, construct the exercise platform as shown below in Figure 10. Note the side battens are angled in close to the box due to the angled sides of the box. There should be 25mm gaps at either front end of the platform. Side battens closest to the box are cut at a slight angle and the platform should be angled slightly downwards for drainage (Figure 10). Make sure there's no gap between the platform and front panel of the box- if there is a gap, this can be sealed closed with the all-weather sealant.

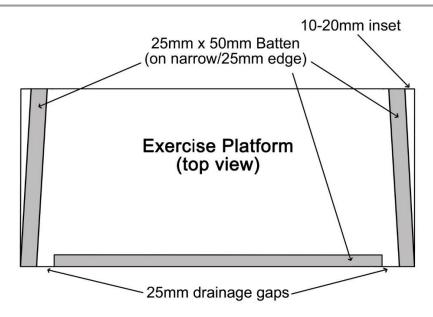


Figure 10. The exercise platform

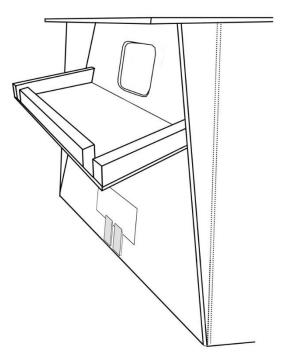


Figure 11. View showing the downward angle of the exercise platform

14. Cut a rectangle of felt measuring 750mmx1000mm. Only one cut should be required as most felt roles are 1000mm wide. The felt should be applied 750mm back-front and 1000mm side to side, with overlaps on all sides.

- 15. The felt can be either torch-on felt, or secured with felt nails (12mm felt nails).
- 16. Applying a few coats of wood preservative is optional but recommended (see image on next page).
- 17. A layer of wood shavings, 2 or 3cm deep, can be put in the nest box if available, however this is not essential. Do not use sawdust or other such fine materials.



The completed exterior nest box (Image: Alan McCarthy)

Step 3.4: Installing the nest box

The nest box/es must be installed by 31 July 2023. They can be installed at any time of the year up to this time.

Safety is the most important consideration when installing a nest box. Please adhere to the following precautions:

- 1. Never install a nest box on your own. Have at least one person helping you.
- 2. If using a ladder, ensure the ladder placement is secure both at the top and bottom of the ladder.
- 3. Both the helper(s) and the person working up the ladder should wear PPE including head protection and work gloves.
- 4. We recommend tying down your ladder as an extra safety measure.
- 5. Using a rope and pulley system to raise up the box from the ground is recommended for interior nest box installation, <u>and is essential for exterior nest box installation</u>. Exterior nest boxes are heavy and so upmost caution must be taken during installation.
- 6. Ideally you should use a harness to prevent a fall.
- 7. Use common sense- if it seems in any way dangerous, <u>don't do it</u>. BirdWatch Ireland are happy to help with any installation queries you might have.

Interior Nest box:

Interior nest boxes should be located in a quiet shed or barn, at least 3 metres off the ground. The barn/shed should have a permanently open entrance/exit. Ideally the box would face the entrance/exit. If installing two nest boxes, one can be installed at each end of the barn/shed.

There are multiple ways of installing an interior nest box. We find using galvinised steel band to be a useful and easy way of securing an interior nest box in almost any situation. Using galvinised steel band, boxes can be secured in place in all-steel sheds (using screws that can screw into galvinised steel sheets), sheds with wooden beams, sheds where the box can only be secured from wooden trusses above etc. See examples below.



Nest box located in a quiet barn. Steel band is secured to wooden beams either side of the box and run across the top of the box above the entrance hole. There are large openings at either end of the barn, one under the box (shown in the photo) and one behind the photographer (Image: Alan McCarthy)



No steel band used with this nest box, it was just screwed onto a platform that was screwed onto the horizontal roof beam, with a few screws securing the lid of the box to the roof beam just above the box (Image: Alan McCarthy)



This box is secured using 2 lengths of steel band from one side of the box over the top and into the wooden roof beam (Image: Alan McCarthy)

Exterior Nest box:

Exterior nest boxes are best situated on large trees (tree trunk at least the diameter of a telephone pole), with a clear view of the box front from the surrounding land. Ideally the box would be situated out of prevailing weather conditions, around 4 to 5 metres high, on a bare trunk so low hanging branches won't block the view of the box from any passing owls. It is also important to locate the

box away from main roads. Locating the box in an area of suitable foraging habitat (such as at the edge of an arable field, an area of rough grassland etc.) will increase the liklihood of it becoming occupied as such areas will be visited by owls while hunting at night. Do not locate the nest box within woodland as Barn Owls are an open habitat species.

For exterior nest boxes, first secure a 1000mm (1 metre) long 50x50mm treated wooden batten to the tree using three stainless steel M8 130mm coach screws or larger. Do not use screws that might rust in the tree. For hardwood trees, you might need to predrill into the tree to prevent shearing of the coach screws. You should also predrill the batten that is fixed to the tree and create divets in the batten where the coach screw heads will sit so they are flush. Screw two 50x100mm pieces of ply or batten onto the front surface of the tree support batten at either end. This will enable you to rest the nest box batten on the tree support batten before you screw both battens together. Screw the battens together using four 70mm long screws. Overtime, as the tree grows, the coach screws might need to be loosened to prevent the box being pushed off the batten by the expanding tree (you can also leave a small gap, 5 to 10mm, between the batten and the coach screw heads when screwing the batten into the tree).

Finally, slide a 100x150mm piece of marine ply or short length of 25x50mm batten behind the box from below. Secure this to the tree with two or so 70mm screws, screwing through the bottom back overhang of the box. This will fully secure the box, preventing it from moving in high winds.



You can see the longer lower batten which is fixed to the tree, and then the upper batten is fixed to the box and sits on the batten that is attached to the tree. Both are screwed together. Slip a small piece of marine ply behind the box and screw this to the tree using 70mm screws, screwing through the small overhang at the bottom of the box. This prevents any movement of the box (Image: Alan McCarthy)



Another nest box in place. You can see the safety precautions used here. Ladder tied to the tree and a pully system to raise the box up to its final position on the tree (Image: Alan McCarthy)



An external nest box installed using a branch for support (Image: Alan McCarthy)

Step 3.4: Avoiding disturbance

Once the nest box is in place it must not be approached or interfered with unless essential maintenance is required (see below). Barn Owls are very sensitive to disturbance, their presence can easily go unnoticed and visiting the nest box, even if well intentioned, at any time of the year can be detrimental. Although the main nesting period is March to August, Barn Owls can nest at any time of the year. It is an offence to cause disturbance to a breeding pair or at the nest site.

Step 3.5: Maintenance of the nest box

Maintenance of Barn Owl nest boxes should be minimised in order to prevent any disturbance to Barn Owls that may be using the nest box. In some cases, Jackdaws will use Barn Owl nest boxes. Jackdaws fill nest boxes with sticks which makes it unsuitable for Barn Owls to use. Where Jackdaws have nested in the nest box, the nest box should be cleaned out after the nesting season in the month of December. It is strongly recommended that you wear work gloves and a face mask/respirator when emptying the nest box of Jackdaw nest material. Do not disturb Jackdaws or other nesting birds which use the Barn Owl nest box during the nesting season, as this is an offence.

Exterior nest boxes may need additional maintenance to prolong the life of the box, such as applying fresh coats of wood preservative, or to adjust the attachment batten of exterior nest boxes as the tree expands with age. Such maintenance should only be carried out in December and only when required for the continued safety and suitability of the nest box.

Never check or visit the nest box yourself, as this can lead to unintentional disturbance to Barn Owls and may cause them to abandon the nest box or fail to breed. If you are interested in the nest box being monitored as part of a national Barn Owl monitoring initiative, please register the nest box with BirdWatch Ireland (see below).



A young Barn Owl which was fitted with a ring as part of a national monitoring programme to learn more about the species and their breeding success (Image: Dario Fernandez-Bellon)

Step 3.6: Recording the location of the nest box

Once installed, we would be very grateful if you could register your Barn Owl nest box(es) with BirdWatch Ireland by visiting here. This information will be kept confidential and will help to assess the distribution of nest boxes across the country and will allow BirdWatch Ireland to assist with monitoring the nest boxes.

If you suspect Barn Owls are using your nest box, or if you see a Barn Owl, please report this and any information on Barn Owls here.

Other Resources

Please see below a list of additional resources on Barn Owls in Ireland and their conservation.

Information on Barn Owls in Ireland

Barn Owls in Ireland (video): https://www.youtube.com/watch?v=YESLEPyNPK8&t=251s

A Guide to Barn Owl Nest Boxes (video): https://www.youtube.com/watch?v=JHTpckUoQ7Q

A Guide to Barn Owl habitats (video): https://www.youtube.com/watch?v=JXet8mJ7F-8&t=173s

The risks of rodenticide exposure to wildlife (video):

https://www.youtube.com/watch?v=h0GEChppqOk&t=8s

Wildlife in Buildings: Linking our built and natural heritage (video):

https://www.youtube.com/watch?v=5IQt3C8uI5E&t=18s

Wildlife in Buildings: Linking our built and natural heritage (booklet):

http://docstore.kerrycoco.ie/KCCWebsite/heritage/wildlifebuildings.pdf

Farming with Barn Owls: Nicky Murphy (video):

https://www.youtube.com/watch?v=WWhV0BtBqog&t=47s

Farming with Barn Owls: Tom Kelly (video): https://www.youtube.com/watch?v=_Kr008--

o3E&t=14s

A Barn Owl breeding season in five minutes (video):

https://www.youtube.com/watch?v=TXX54IoZAXU&t=201s

Ballycahill Schools Barn Owl nest box project (video):

https://www.youtube.com/watch?v=2Bwzbo3g4FI

A Guide to surveying for Barn Owls (video): https://www.youtube.com/watch?v=yYzEzW7PFdE

Information on Barn Owl ecology and conservation (booklet):

https://birdwatchireland.ie/publications/barn-owls-in-ireland-info-on-ecology-and-their-conservation/?fbclid=IwAR0P-JCg1TyH_FYRVInm27-apxyQeh36oJeKrHKWm1KQSZlo933ilUEg53A

Barn Owl Monitoring Report (report): https://birdwatchireland.ie/barn-owl-breeding-season-2020/#:~:text=The%20Barn%20Owl%20monitoring%20highlighted,Ireland%20in%20a%20single%20 year. Visit: www.BirdWatchIreland.ie for updated reports

Barn Owl tracking (video): https://www.youtube.com/watch?v=UNE-VhtXCoA&t=60s

Barn Owls and major roads (video): https://www.youtube.com/watch?v=Eg9rTiXBhG4&t=2s

Reporting information on Barn Owls in Ireland

Report information on Barn Owls in Ireland to BirdWatch Ireland: https://birdwatchireland.ie/our-work/surveys-research/research-monitoring/raptors/barn-owl-survey/

Useful contacts

The National Parks and Wildlife Service

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

Wildlife licences: https://www.npws.ie/licences/disturbance

Contact NPWS or your local ranger: https://www.npws.ie/contact-us

The Campaign for Responsible Rodenticide Use Ireland: http://www.crru.ie/

Wildlife Rehabilitation Ireland: http://wildlifehospital.ie/

Bat Conservation Ireland: https://www.batconservationireland.org/contact-us

BirdWatch Ireland: https://www.birdwatchireland.ie

To find out about local Barn Owl groups and conservation efforts in your area, contact BirdWatch

Ireland; Email: info@birdwatchireland.ie

Frequently Asked Questions

Q: How long will it take Barn Owls to find the nest box?

A. There is huge variation in the length of time it might take Barn Owls to find and occupy a nest box. In some cases, Barn Owls can move in after only a few weeks, whereas in other cases it has taken up to 20 years. Not all nest boxes will be occupied, so there is no guarantee you will get Barn Owls in your nest box but by following the guidance in this document you will be giving yourself the best chance.

Q: Can a pair of Barn Owls not be introduced to the nest box, would this not be easier than trying to encourage them?

A. Barn Owls are still widespread and in fact their population is slowly increasing in certain parts of the country, they are present in every county in the country. There is no requirement to introduce Barn Owls, and it is necessary to address the factors which have caused their decline (e.g. habitat loss, loss of nest sites), this is the best way to help Barn Owls and other wildlife.

Q: I haven't seen a Barn Owl on my farm for many years, is there any point in putting up a nest box?

A. Barn Owls may occur in an area without your knowledge. By taking the measures to improve the habitats on the farm then you can attract Barn Owls (and other wildlife) even if they have not been present in some time. Barn Owl populations are slowly recovering in many parts of the country and returning to areas where they have been absent for several decades.

Q: I hear strange noises coming from the nest box at night, should I check it to see what is going on?

A. No, always resist the urge to check the nest box as this could cause the Barn Owls (if present) to abandon. Please contact BirdWatch Ireland if you suspect the nest box may be occupied and they can assist with monitoring the nest box (under licence).

Q: I have gone through all the guidance and watched the videos but I am struggling to decide on the best location for a nest box on my farm.

A. Please contact BirdWatch Ireland for advice and take photos of the potential locations for the nest box.

Q: I think I have Barn Owls using the nest box, but I fear that by drawing attention to it, this may result in people coming to my farm or requiring changes to how I farm.

A. This will not be the case, nobody will visit unless you are happy for them to do so and having Barn Owls on your farm is hugely positive and will not require any other changes to the way you farm.

APPENDIX 1:

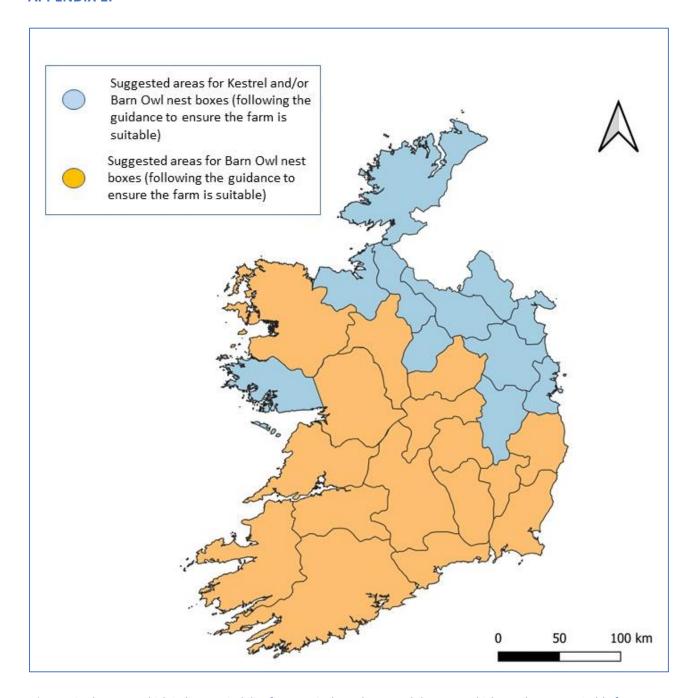


Figure 12. The areas which indicate suitability for Barn Owl nest boxes and the areas which may be more suitable for Kestrel nest boxes based on the distribution of the Barn Owl population and nest site availability. Note that this map provides a guide to the areas which are suitable for nest boxes for either species however the specific criteria for suitability on the farm need to be met (for example avoid placing Barn Owl nest boxes within 500m of a major road, above 300m in altitude etc.)

APPENDIX 2:

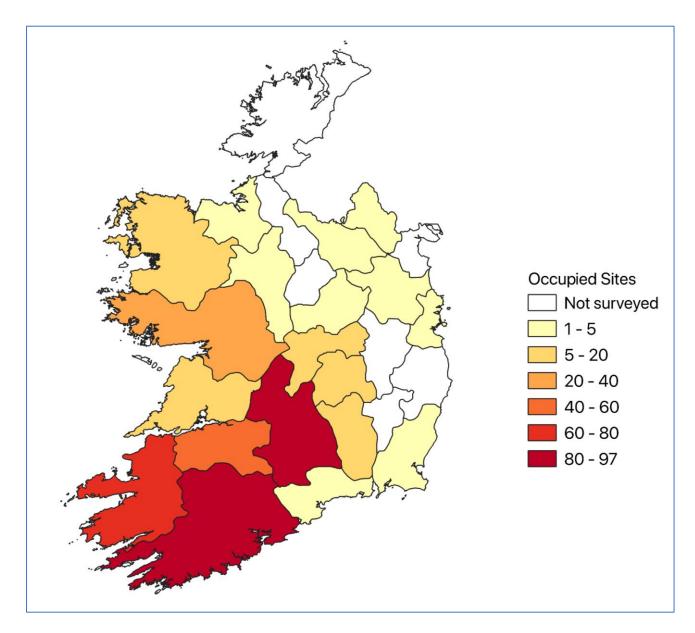


Figure 13. The number of occupied Barn Owl sites recorded in each county during the period 2010 - 2020 (n = 422)

Barn Owl

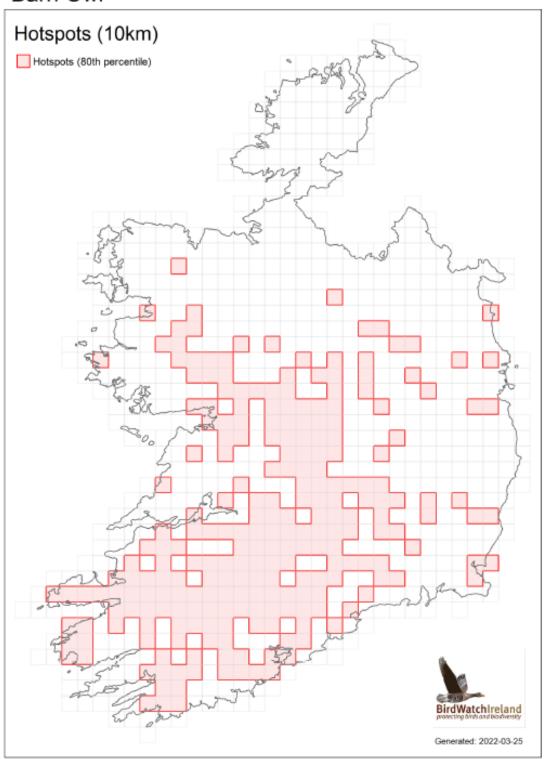


Figure 14. The Barn Owl hotspot map showing the areas known to be important for Barn Owl based on the 10km grid square

APPENDIX 4:

Kestrel nest box

Here is an illustration of a Kestrel nest box (RSPB Design - https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/nestboxes/nestboxes-for-owls-and-kestrels/kestrel-nestboxes/), showing the dimensions. 9mm or 12mm Marine ply is best. Roofing felt can also be used over the top and sides to provide additional protection.

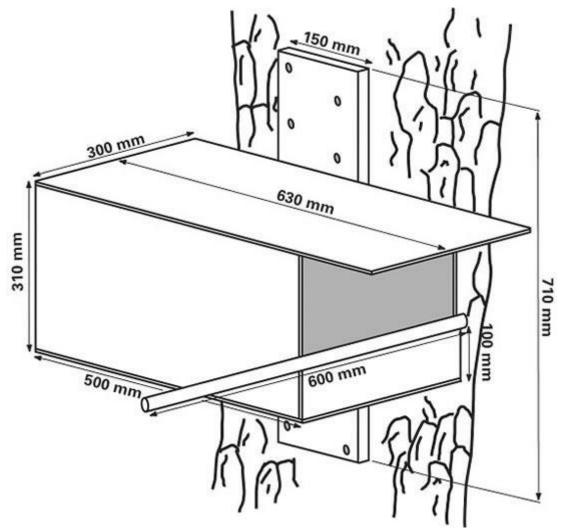


Figure 15. The design and dimensions of a Kestrel nest box (RSPB Design)

Note the small perch at the entrance. This allows the adult and young to perch outside the box.

Important tips

- 1) Face the box away from the prevailing winds (so generally, face the box toward the north or east).
- 2) The box can be placed in a barn, an old building or shed, or on a tree.
- 3) Put the box at least 20 feet from the ground if possible.
- 4) Put the box away from occupied houses, or any other area where people visit regularly. The quieter, the better.
- 5) Don't 'hide' the box. Make sure the box is visible to a passing Kestrel. If the box is in a tree, trim away branches at the entrance so that birds have a clear flight path to the box.