

Bat Preliminary Roost Assessment & Breeding Bird Assessment

Lower Chatts Farm, Cliff Hollins Lane,
Oakenshaw, Bradford, BD12 7ET

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Version 02

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Field surveys have been carried out and focused to a level of detail required to achieve the stated brief of the work. No part of this report may be copied or duplicated without express permission of Miranda Cowan Ecology Ltd. and the party for whom it was prepared.

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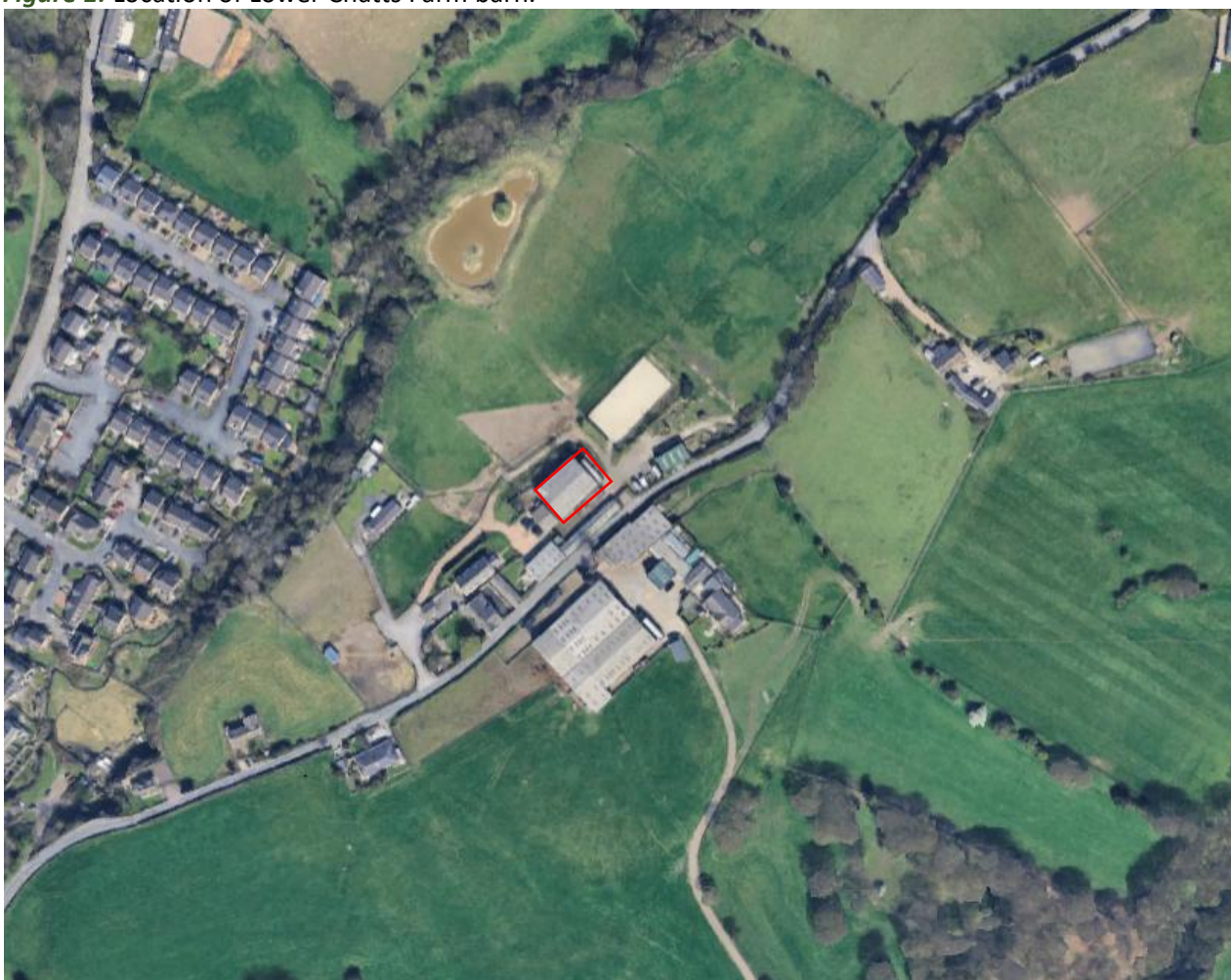
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1 INTRODUCTION

Background

- 1.1 This Bat Preliminary Roost Assessment (PRA) and Breeding Bird Assessment has been prepared on behalf of Mr & Mrs Jacobs (the 'Client') who seek planning consent for conversion of a barn located at Lower Chatts Farm, Cliff Hollins Lane, Oakenshaw, Bradford, BD12 7ET (the 'Site').
- 1.2 The Site location is shown below (**Figure 1**) and positioned within the context of a rural landscape, although within c.3 miles of urban conurbation associated with Bradford to the north and Dewsbury to the south.
- 1.3 The PRA was completed on the 6th of February 2026 by Miranda Cowan (2017-52426-CL17-BAT) a "Capable" level surveyor under the CIEEM competency framework¹.

Figure 1: Location of Lower Chatts Farm barn.



¹ <https://cieem.net/wp-content/uploads/2019/02/CSS-BATS-April-2013.pdf>

The Proposal

- 1.4 The proposal² relates to conversion of an existing metal barn for residential purposes. This will relate to the existing footprint of the current metal barn and shall not require removal of any surrounding vegetation.

Objectives

- 1.5 The objectives of the PRA and breeding bird assessment were to:
- Determine the potential of the Site for roosting bats by identifying and describing any access / egress points associated with the property.
 - According to standard assessment criteria grade the Site as Negligible Low, Medium or High potential for roosting bats.
 - Subject to the assessment findings outline recommendations for the requirement of follow up bat activity surveys.
 - Identify the evidence of disused / active bird nests or potential for nesting birds from March to August, inclusive.
 - Outline mitigation measures to avoid and minimise impacts and identify biodiversity enhancement.

Legislation and Policy

- 1.6 Legislation pertaining to bats and birds is included as **Appendix B**.
- 1.7 The site is covered by the Kirklees Local Plan – Allocations and Designations (adopted 27th February 2019) which comprises of policies to facilitate decision making relating to new developments and where should they be located relative to safeguarding rural spaces.
- 1.8 Kirklees online mapping for allocated sites: <https://mapping.kirklees.gov.uk/> and <https://www.kirklees.gov.uk/beta/planning-policy/local-plan.aspx> was searched for the Sites position relative to Kirklees Wildlife Habitat Network (WHN).

² Site Plan – As Proposed (Dec 2025). A(90)-01

2 METHODS

Desk Study

2.1 As part of the PRA, an ecological desk-study of open-access data was sourced from:

- West Yorkshire Bat Group (WYBG) for bat records within a 2km radii.
- Review of West Yorkshire Ecology Services <https://www.wyjs.org.uk/> Bat Alert Zone map to identify the position of the Site relative to high value bat habitat and potential for roosting.
- Multi Agency Geographic Information for the Countryside (<https://magic.defra.gov.uk>) to identify granted European Protected Species licencing (EPSL) specific to bats and the location of notable habitats that could indicate the presence of established habitats as suitable roost sites and potential conduits for bat foraging, commuting and population expansion.
- 1:25000 OS base maps (www.ordnancesurvey.co.uk) to develop and understanding of functionally linked habitat with the wider landscape and potential barriers to bat dispersal.
- Google Earth© aerial photography to further inform of functional habitat connectivity of the site wider environment.

Preliminary Roost Assessment

2.2 The PRA methodology adhered to Good Practice Guidelines³ including as assessment of bat commuting / foraging potential, see **Table 1**.

2.3 The existing barn was assessed internally and externally for PRF such as small gaps under barge/soffit/fascia boarding, gaps around windows and doors, and missing / lifted tiles or roof sheeting.

2.4 Evidence of bats having actively used PRF including staining within gaps, bat droppings or urine staining under gaps were noted. Indicators that potential access points had not recently been used included the presence of cobwebs and general detritus within the access point.

³ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

Table 1: Criteria for assessing potential suitability of the Site for bats.		
Potential Suitability	Description	
	Roosting habitats in structures	Potential flightpaths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year, complete absence of crevices/ suitable shelter.	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/ protection for flight-lines, or generate/shelter insect populations available for foraging bats.
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats ^c).	Habit that could be used by small numbers of bats as flightpaths such as a gappy hedgerow or unvegetated stream, but isolated, i.e., not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flightpaths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity, or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flightpaths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses, and grazed parkland. Site is close to and connected to known roosts.
<p>a Negligible is defined as ‘so small or unimportant as to be not worth considering insignificant’. This category may be used where there are places that a bat could roost or forage (due to one attribute), but it is unlikely that they actually would (due to another attribute).</p> <p>b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.</p> <p>c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.</p>		

Breeding Bird Assessment

- 2.5 Searches were made for disused birds nesting that potentially would have been occupied during 2025 between March and August, inclusive.

3 RESULTS

Desk Study

Conservation Sites

- 3.1 There are no designations within 10km of the Site for which bats are the qualifying species.

Bat Records

- 3.2 West Yorkshire Bat Group (WYBG) confirmed they do not hold records within 1km radius of the Site. Seventeen records were provided for the area of Oakenshaw and Bradford (dated 1900-2015). Species included low counts of Pipistrelle *Pipistrellus* spp. Leiser's bat *Nyctalus leisleri* and vesper bat species *Vespertilionidae*.

European Protected Species Licencing

- 3.3 There was one EPSL on the 2km radii periphery (<https://magic.defra.gov.uk>). This related to destruction of a common pipistrelles resting place, reference 2014-6160-EPS-MIT. This EPSL is not significant to the Site.

Biodiversity land Allocations

- 3.4 Review of Kirklees mapping for allocated sites <https://mapping.kirklees.gov.uk/> confirmed that the Site does not fall within the Wildlife Habitat Network. The nearest position of the Wildlife Habitat Network was 100m southeast, associated with an area of woodland shown as Priority⁴ Deciduous Woodland on <https://magic.defra.gov.uk>.
- 3.5 The same woodland extents and the Site are within Kirklees Bat Alert Zone, meaning landscapes with suitable bat foraging and roosting habitat.

Preliminary Roost Assessment

- 3.6 Findings from the PRA are described below, with supporting photographic plates shown as **Table 2**.

Site description

- 3.7 A modern constructed large barn supported by a metal sub-frame and covered with corrugated metal sheeting. The entirety of the barn was single-lined, with windows throughout the roof section and lighting to indicate use outside daylight hours.
- 3.8 There was no external or internal bat Potential Roost Features and the barn was graded as 'None' bat roosting value.
- 3.9 The immediate surroundings of the barn supported localised patches of garden vegetation and modified horse grazed fields, with the nearest (200m) functional habitat for bat flight paths being a large pond surrounded by trees and shrubs.
- 3.10 Bat foraging and commuting potential was assessed as 'Low', meaning limited connected habitat that that could be used by small numbers of bats as flightpaths.

⁴ High conservation value woodland as recognised through UK and Local Biodiversity Action Plans and often a good indicator of a Habitat of Principal Importance as listed under the Natural Environment and Rural Communities Act (NERC) 2006.

Table 2: Photographic Plates	
Plate 1: Northeast elevation of barn.	Plate 2: Southwest elevation of barn.
	
Plate 3: Internal view of barn, single lined throughout.	Plate 4: Internal view of roof, single lined.
	

Nesting Birds

- 3.11 There was no evidence of disused bird’s nests associated with the Site. Potential for bird nesting from March to August was assessed as negligible. The door of the barn remains as closed with no gaps in the main barn structure for birds to access.
- 3.12 The Client stated that swallows *Hirundo rustica* nest within adjacent horse stables of the farm curtilage.

4 CONCLUSION AND RECOMMENDATIONS

Bats

- 4.1 The PRA confirmed the barn to be of 'None' value for roosting bats with the immediate surrounding habitat being of 'Low' value for bat foraging and commuting. The proposal presents no risk of impacting upon roosting bats and no further bat surveys are required.
- 4.2 Post development the integration of external lighting can influence the presence of bat foraging and therefore requires consideration at the design phase. Any new lighting should be carefully designed (Miles *et al.*, 2018; Gunnell *et al.*, 2012) with summary guidance provided below:
- avoid installing new lighting in proximity to key ecological features, e.g., tree lines;
 - modern LED fittings can be used, provided that they are of a warm white spectrum (ideally <2700Kelvin), to reduce blue light. Recent studies have shown that LED streetlights can significantly impact on nocturnal invertebrate populations, which are staple food for bats; therefore, their adoption shall be carefully planned to avoid adverse impact;
 - use directional lighting to reduce light spill, e.g., use shields/hoods or install bespoke fittings. Use downlighting to illuminate features such as footpaths whilst minimising the vertical and horizontal spill of light;
 - where using bollard lighting, design columns to reduce horizontal light spill;
 - the use of timers or motion sensors, so that lighting is only active when needed, is strongly encouraged;
 - To reduce reflected illumination, floor surface materials with low reflective quality should be sourced;
 - For internal lights, recessed rather than pendant type fittings are recommended, as they cause considerably less glare. Using low-glare glass may be appropriate where internal lighting could potentially influence sensitive ecological receptors.

Birds

- 4.3 The survey concluded no evidence or potential for bird nest establishment associated with the barn.
- 4.4 The Client should remain aware that the core bird nesting season extends from March to August inclusive, although where favourable conditions prevail birds will commence nesting in February. The minimum buffer for the protection of a bird's nest is 5m, therefore any works that result in ongoing movement, noise and vibrations should consider the potential for nesting birds within surrounding garden vegetation.
- 4.5 Minimising potential disturbance to nesting birds can be achieved by storing materials and operating machinery on hardstanding away from areas of garden vegetation. And, for the Client and contractors to remain aware of bird behaviours such as rapid flying and alarm calling, indicating a bird in stress due to potential nesting. Where nesting activity is potentially identified within 5m of the works an ecologist should be consulted.
- 4.6 The presence of nesting swallows within adjacent horse stable are not likely to be disturbed by the works as the stables are already frequented by human activity. However, consideration should be given to construction activity, remaining aware of minimising impacts on flight lines.

Species Enhancement

- 4.7 **Appendix A** includes a Species Enhancement Statement for both bats and birds which is a validation requirement of the planning process. Enhancement through provision of artificial bat roosting and bird nesting can be achieved on the external features for the barn or throughout the Farm's wider curtilage.
- 4.8 Discussion with the Client at the time of the field survey confirmed intention to erect a barn owl *Tyto alba* box on a tree located on a field boundary. This proposed action is supported with additional guidance included as **Appendix A**.
- 4.9 It is recommended the Client consults West Yorkshire Bat group for bat box installation. Or this can also be guided by an ecologist, who will also provide guidance on nest box installation.



APPENDIX A - Species Enhancement Statement

Provision for Bat Roosting

Measures to support enhancement of the local bat population would include habitat planting and artificial bat boxes. The intention of habitat planting is to provide improved connectivity to wider landscape habitats, achieved by hedgerow and shrub planting.

Bat boxes are best positioned on buildings or trees with good connectivity to habitats which bats can use as a flight path and for foraging. Enhancement of habitats and provision of bat boxes (two would be ideal) is not a mandatory requirement, although will be viewed favourably by the local Planning Authority as such measures support Planning Policies for nature conservation.

Figure 2 illustrates opportunities for bat enhancement with suggested boxes and how to install illustrated below. Any bat box obtained should always be draught-proof and made from a thermally stable, resilient ecostyrocete or woodcrete material.

Recommended Bat Boxes, source: https://www.nhbs.com/	
Photo	Description and suitability
	<p><u>Trees/1FF Schweqler Bat Box</u></p> <p>Ideal for trees and buildings, ensuring the box is free from side branches and leaf clutter. On buildings boxes can be placed on gable ends or below the overhang of the roof, although avoid positioning above windows.</p> <p>The boxes should be installed at a minimum height of 3-4m, face southeast or southwest to allow heating from the sun and shelter from prevailing winds.</p> <p>Boxes with an opening at the base will allow droppings to fall out naturally and will not require cleaning. This is the reason for not positioning boxes above windows.</p> <p>Only a suitably experienced and licensed ecologist should inspect bat boxes.</p>
	<p><u>1FQ Schweqler Bat Roost</u></p> <p>Ideal for all types of bats which inhabit buildings. The shape and design make it equally attractive to bats as a roost or nursery. Access is via a step-like recess which enables even young and inexperienced bats to safely access the box. The internal layout provides three different areas from which bats can hang and which offer different levels of light and temperature.</p> <p>It can easily be attached to most types of external brick, timber or concrete and can also be placed inside a roof space. The box should be positioned a minimum of 3-4m above the ground, where there is a clear flight path for bats entering and leaving.</p>

Provision for nesting birds

As swallows already nest annually within stables of the farms curtilage, nesting provision for birds is otherwise targeted towards general species that favour hole nest boxes as detailed below. Information on barn owl box installation is also provided.

Recommended Bird Boxes, source: https://www.nhbs.com/	
Photo	Description and suitability
	<p>Communal house sparrow box would be suitably placed on any buildings within the farm’s curtilage. As colonial birds this box has sperate nesting compartments with a standard 32mm entrance hole.</p> <p>The boxes can be hung to fit the shape of any building: horizontally or vertically, diagonally to fit gable eaves or A-shaped for a gable apex. The Terrace should be installed at least 2m to 4m off the ground making sure that there is a clear flight path to the nest. Dimensions: 24 x 37. 6 x 17 cm (H x W x D). Weight: 2.2 k.</p>
	<p>See the Barn Owl Trust website on barn owl boxes, how and where to position them: https://www.barnowltrust.org.uk/barn-owl-nestbox/barn-owl-nestboxes/</p> <p>General requirements are to position the box on a building or a mature tree stem free of leaf clutter looking out onto open countryside with accessible rough grassland. Do not position close to woodland as the box is likely to become occupied by tawny owl. Ensure box remains fully waterproof and has longevity in that it will not rot.</p> <p>Please note that Barn Owls are a Schedule 1 species and so an occupied box must only be disturbed or inspected by a licensed individual.</p>

Figure 2



APPENDIX B - legislation

All UK bats and their breeding sites or resting places are protected under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (the “Conservation Regulations”), which makes it illegal to:

- Deliberately capture, injure, or kill any such animal
- Deliberately disturb such an animal; and/or
- Damage or destroy a breeding site or resting place of such an animal

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection; and/or
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

Effect on development works

A European Protected Species Mitigation (EPSM) Licence issued by the relevant statutory authority (e.g. Natural England) will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded de facto protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

NATIONAL PLANNING POLICY

National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration, and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the ‘biodiversity duty’. Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of ‘principal importance for the conservation of biodiversity.’ This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

Breeding Birds

All birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (as amended) and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird; and,
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.

Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for species such as barn owl *Tyto alba*, a species that typically nests in barns / agricultural buildings. If any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. That person shall be guilty of an offence.