



Leisure Center Demolition

Buncrana

Preliminary Ecological Appraisal (PEA)

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Contents

1	Introduction	3
2	Statement of Authority	4
3	Legislation	4
4	Methodology	6
5	Results	9
6	Discussion	10
7	Recommendations and Mitigation	11

Appendix 1 **Figures**

Appendix 2 **Photographs**

Table 1 **Sett Classification**

Table 2 **Survey Details**

Table 3 **Weather Details**

Table 4 **Designated Sites**

Table 5 **Bird Records**

1. Introduction

1. 1 Nelson Ecology Ltd were commissioned by Donegal County Council to undertake a Preliminary Ecological Appraisal (PEA) survey and assessment of lands at Aileach Road, Buncrana, Co. Donegal, grid reference 55.130808, -7.4601138, hereafter referred to as “the site”, see figures 1 and 2 at appendix 1. Construction of replacement dwelling. The site and lands were accessed from the from the Aileach Road, Buncrana.
1. 2 The purpose of the PEA assessment and if necessary, further ecological survey of the proposed site was to determine if any protected habitats or species may be negatively impacted upon during land clearance and demolition.
1. 3 All surveys and reporting were undertaken by Tyrone Nelson BSc Hons, MCIEEM, AEECoW of Nelson Ecology Ltd. A qualified ecologist trained and experienced in ecological survey and assessment. Trained by The Chartered Institute of Ecological and Environmental Management (CIEEM).
1. 4 The aims of the preliminary ecological appraisal informs the required information to allow further assessment of ecological information and further potential survey and assessment of the proposed site if necessary, to provide a description of existing habitat types, to determine the existence and location of ecologically valuable areas, assess the potential presence of priority habitats and species to include priority species and habitats that may be negatively impacted through development practises and processes. The survey will include all lands within the proposed site boundary and a 50m buffer.

2. Statement of Authority

2. 1 Tyrone Nelson is the principal ecologist and director of Nelson Ecology Ltd. He holds an Honours degree in Environmental Science (University of Ulster 2005). He is a full member of both the Chartered Institute of Ecology & Environmental Management (CIEEM) and Association of Ecological and Environmental Clerk of Works (AEECoW). He is fully trained and experienced in a wide range of ecological survey techniques, mitigation, identification, legislation, survey technology and assessment by CIEEM, CEDaR, RSPB, Birdwatch Ireland and BTO (British Trust for Ornithology). He has been trained in ecological assessment by the Chartered Institute of Environmental and Ecological Management (CIEEM). He has been trained by Bat Conservation Ireland in bat roost assessment, legislation, identification and survey. He has been trained in bat roost assessment by the Northern Ireland Bat Group. He has been practising and training in professional ecological survey and assessment since 2004. William Mc Cauley has a freshwater and marine biology degree and is a former scientific officer with the Loughs Agency. He has been completing bat surveys with Nelson Ecology since 2019. He has been trained by Nelson Ecology Ltd in bat survey methodology, equipment and data management. He is a full member of CIEEM. All surveys were supervised by principal ecologist Tyrone Nelson.

3. Legislation

3. 1 Priority species and habitats are protected by law. In Ireland are protected under the Wildlife Act 1976 and amendments. In Northern Ireland, bats are protected under the Wildlife (NI) Order 1985.
3. 2 Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995 (as amended) and The Environment (Northern Ireland) Order 2002.
3. 3 Environmental Protection Agency Act 1992
3. 4 Birds are protected under the EU Habitats Directive (92/43/EEC).
3. 5 It is an offence to deliberately or recklessly:
- capture, injure or kill a wild bird;
 - take, damage or destroy the nest of any wild bird while that nest is in use or being built; or;
 - at any other time take, damage or destroy the nest of any wild bird included in Schedule A1; or
 - Obstruct or prevent any wild bird from using its nest; or
 - Take or destroy an egg of any wild bird; or

- Disturb any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
 - Disturb dependant young of such a bird.
3. 6 Any person who knowingly causes or permits to be done an act which is made unlawful by any of these provisions shall also be guilty of an offence.
3. 7 It is therefore advised that any tree, hedge loss or vegetation clearance should be kept to a minimum and removal should not be carried out during the bird breeding season including 1st March to 31st of August, unless pre-clearance surveys show an absence of breeding birds.
3. 8 Bats are a protected species by law. In Ireland bats are protected under the Wildlife Act 1976 and amendments (ROI). In Northern Ireland, bats are protected under the Wildlife (NI) Order 1985.
3. 9 Bats are protected under the EU Habitats Directive (92/43/EEC). All Irish bats are listed in Annex IV of the directive except the lesser horseshoe bat (*Rhinolophus hipposideros*) which is listed in Annex II giving it a higher level of protection, this relates to designation of Special areas of Conservation (SACs) for important populations of lesser horseshoe bats.

It is an offence to deliberately or recklessly:

- capture, injure or kill a wild bat;
- harass a wild bat or group of bats;
- to disturb a wild bat in a roost (any structure or place it uses for shelter or protection);
- to disturb a wild bat while it is rearing or otherwise caring for its young (this would be a 'maternity' roost);
- to obstruct access to a bat roost or to otherwise deny the animal use of the roost;
- to disturb such a wild bat in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of that species;
- to disturb a wild bat in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

It is also an offence to:

- damage or destroy a breeding site or resting place of such an animal (note: this does not need to be deliberate or reckless to constitute an offence);
 - keep, transport, sell or exchange or offer for sale or exchange any wild bat or any part or derivative of one.
3. 10 Legislation ensures that any structure whether man-made or natural which bats use for shelter or protection is protected.

3. 11 Badgers and their setts are protected under article 10 of the Wildlife Order 1985 (Northern Ireland) as amended. It is an offence to intentionally or recklessly kill, injure or take away any wild animal indicated in schedule 5 of this order, which includes Badger (*Meles meles*). It is an offence to intentionally or recklessly damage or destroy, or obstruct access to, any structure or place which badgers use for shelter or protection, damage or destroy anything which conceals or protects any such structure, disturb a badger while its occupying a structure or place which uses it for shelter for protection.

4. Methodology

Extended Phase 1 Habitat Survey

4. 1 An extended phase 1 habitat survey was undertaken with reference to the handbook for Phase 1 Habitat Survey (JNCC 2010)¹ to establish the presence and distribution of habitat types within the proposed site to identify potential priority species and habitats that may provide ecological constraints to the proposed site development.
4. 2 The site boundary and a 50m buffer zone were walked over (were accessible) on the 29th of August 2022. In appropriate conditions with no obstruction to entry within the site lands. The timing of the habitat survey was within the optimal time and season for habitat assessment (April-September). All habitat types were identifiable during survey. The broad habitats within the proposed site were classed according to species growth and type.

Preliminary Bat Roost Potential

4. 3 A preliminary bat roost potential assessment was carried out on the existing lands and existing buildings. The site and surrounding area were walked and if necessary, bat roost features identified. See accompanying bat roost survey and assessment report.

Birds

4. 4 The site trees and hedging were identified for bird potential during the PEA. Survey was carried out within the optimal time of year for breeding birds. An additional nest search survey closer to the planned works will be carried out during clearance works if works will be carried out within the bird breeding season (March 1st to August 31st) and any substantial hedging or trees are planned for removal.

Preliminary Badger Survey

4. 5 A preliminary badger survey was carried out on the 29th of August 2022.

¹ Handbook for Phase 1 Habitat Survey – a technique for environmental audit, JNCC 2010.

- 4.6 Badgers and their setts are protected under article 10 of the Wildlife Order 1985 (Northern Ireland) as amended. It is an offence to intentionally or recklessly kill, injure or take away any wild animal indicated in schedule 5 of this order, which includes Badger (*Meles meles*). It is an offence to intentionally or recklessly damage or destroy, or obstruct access to, any structure or place which badgers use for shelter or protection, damage or destroy anything which conceals or protects any such structure, disturb a badger while its occupying a structure or place which uses it for shelter for protection.
- 4.7 The entire site and a 50m buffer zone (were accessible) was searched for evidence of badger activity, evidence may be in the form of:
- Faeces/latrines
 - Setts
 - Paths between setts and feeding areas
 - Scratching posts
 - Snuffle holes
 - Day nests
 - Hair traces and Footprints
- 4.8 If evidence was found, then badger activity would be assessed by:
- Number of active holes
 - Number of partially used holes
 - Number of disused holes
- 4.9 Setts would be classified using the conventions shown in table 1.

Table 1 Sett Classification

Sett Type	Definition
Main sett	Several holes with large spoil heaps and obvious paths emanating from and between sett entrances.
Annexe	Normally less than 150m from the main sett, comprising several holes. May not be in use all the time, even if main sett is very active.
Subsidiary	Usually at least 50m from the main sett with no obvious paths connecting to other setts. May only be in use intermittently.
Outlier	Single setts used periodically.

4. 10 The site lands and a 50m buffer zone were walked over in appropriate conditions with no obstructions to access to the proposed site. Any evidence of badger activity or setts would have been recorded by grid reference and mapped on appropriate maps as target notes. The site borders were focussed upon to identify any existing badger setts or otter holts within the woodland and banks identified during survey.

Guidance

4. 11 Guidance was taken from The Chartered Institute of Environmental and Ecological Management (CIEEM)² and Bat Conservation Guidelines 3rd edition 2016³.

Equipment Used

4. 12 Swarovski EL 8.5 x 42 Binoculars. A Canon 7D with 250mm lens. Fujifilm F50.

Designated Sites

4. 13 Designated sites boundaries sourced from the NPEWS protected areas web viewer⁴

Table 2 Survey Details

Date	Stage
29/08/2022	PEA

Table 3 Weather Details

Date	Visibility	Temperature °C	Cloud	Rain	Wind Dir/Force (beaufort)
29/08/22	excellent	18	6/8	None	NE/2

² https://www.cieem.net/data/files/Publications/Guidelines_for_Preliminary_Ecological_Appraisal_Jan2018_1.pdf

³ Bat survey for professional ecologists, Good practise Guidelines, 3rd edition, 2016

⁴ <https://arcgis.com/apps/webappviewer/index.html?id=d818e8358abc46aa907aa2d169d2fb30>

5. Results

Phase 1 Habitat Survey

5. 1 Overgrown amenity grassland was dominant within the site with scattered trees. The site is bordered by walls and concrete pathways (see photos 1-2 at appendix 2).

5. 2 Invasive Species

5. 3 No invasive species were identified during the habitat survey.

Preliminary Badger Search

5. 4 The site is of a relatively small size. A badger search was undertaken on the 29/08/23. During searches no evidence of badgers was recorded. No snuffle holes, latrines or tracks of badgers were found, and no setts were found within the site boundary or a 50m buffer zone.

5. 5 Preliminary Otter Search

5. 6 Evidence of Otter was searched for with no evidence found. The eastern and western boundaries are bordered by the school sports grounds and industrial buildings and is not suitable for otter habitation.

Bat Roost Potential

5. 7 See accompanying bat survey and assessment report.

Table 4 Designated Sites

Designated Site	Designation	Distance	Designation Features
Lough Swilly SAC	SAC	200m	Estuaries [1130] Coastal lagoons [1150] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] <i>Lutra lutra</i> (Otter) [1355]
Lough Swilly SPA	SPA	2.5km	Waterbirds, Wildfowl and Wetlands

Birds

5. 8 It was late in the bird breeding season but nesting birds may be of concern if tree or hedge removal is completed within the bird breeding season (March-August).

Newts

5. 9 There were no areas of standing or running water that may habituate newts.

Table 5 Birds Recorded

Common name	BTO Code	Scientific Name
Blackbird	B.	<i>Turdus merula</i>
Dunnock	D.	<i>Prunella modularis</i>
Chaffinch	CH	<i>Fringilla coelebs</i>
Jackdaw	JD	<i>Corvus monedula</i>
Rook	RO	<i>Corvus frugilegus</i>
Robin	R.	<i>Erithacus rubecula</i>
Woodpigeon	WP	<i>Columbe palumbus</i>
Wren	WR	<i>Troglodytes troglodytes</i>

6 Discussion

6. 1 The proposed site has low quality habitat with rough ground inhabited by overgrown amenity grassland and scattered mature trees on the site boundary.

Birds

6. 2 To adhere to the Wildlife Legislation clearance of any vegetation that may contain nesting birds must be completed outside of the bird breeding season (March to August) or a detailed nesting bird survey must be conducted by a qualified ornithologist.

Newts

6. 3 No evidence of suitable newt habitat was recorded on the proposed site.

Badgers

6. 4 No evidence of badgers was recorded.

Bats

6. 5 See accompanying bat roost report and assessment.

Otter

6. 6 No evidence of otter was recorded.

Priority Habitats

6. 7 No priority habitats were identified during survey within the site boundary. The site is predominantly rough ground with scattered mature trees at the boundary.

7 Recommendations and Mitigation

Birds

7. 1 Further survey prior to and during clearance works if carried out during the bird breeding season will identify nesting birds if works are conducted within the breeding season period. A qualified Ornithologist will identify nesting birds through nest searches during the breeding season. A nesting bird survey should be carried out 24 hours prior to clearance to allow identification of nests and prevent disturbance and destruction of nesting birds and adhere to the Wildlife Order (Northern Ireland) 1985 as amended, if clearance must be carried out during the bird breeding season.

Designated Sites

7. 2 It is noted that the site is not hydrologically connected to the Lough Swilly SPA/SAC. An appropriate Construction Environmental Management Plan (CEMP) and Environmental Method Statement for construction works to incorporate pollution controls to prevent potential contamination.

Appendix 1 Figures

Figure 1 Site Boundary



Figure 2 Extended Phase 1 Habitat Map



Photograph 1 Leisure Centre and Overgrown Vegetation



Photograph 2 Bordering Trees and Leisure Centre

