

Ivydene, Harrowbarrow, Cornwall

Bat and Nesting Bird Visual Survey

Ref: PE546

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Prepared by: Dr Polly Couldrick MCIEEM

For: Mr & Mrs Mallett

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1. INTRODUCTION

- 1 It is proposed to create a single-storey extension at Ivydene, Harrowbarrow, Cornwall, PL17 8BA that will involve the demolition of a conservatory and also tie into an existing roof. As the proposed work will disturb the roof of the property it may therefore impact bats and nesting birds. The OS Grid reference of the site is SX 39744 69943.
- 2 Pan Ecology was commissioned in October 2023 to carry out a visual bat and nesting bird survey to inform a planning application. Bats and nesting birds are legally protected (see Appendix 1).

2. SURVEY METHODOLOGY

- ³ The survey area was defined as the roof of the property that will be impacted by the proposed development and the existing conservatory as indicated in Figure 1.
- 4 An assessment of the suitability of the survey area and surrounding habitats to support bats and nesting birds was made.
- 5 A detailed search of the interior and exterior of the property was carried out using a high powered torch to illuminate all areas thought suitable for bats and nesting birds. Any accessible cracks and crevices were investigated with the use of a torch and endoscope where neccessary.
- 6 The survey involved looking for bats and nesting birds and for evidence of their use, including droppings, pellets, staining, liming, feathers and feeding remains. Survey details are shown in Table 1.

Table 1 - Survey details

Date	Type of survey	Personnel - bat licence number	Weather conditions
02.10.23	Visual survey	Dr Polly Couldrick	Full cloud, light wind, dry.
		2022-10526-CL18-BAT	Temp 16°C

7 The survey methodology adopted follows the guidance given in 'Bat Surveys for Professional Ecologists – Good Practice Guidelines' (Collins, 2023) and 'Barn owl survey methodology and techniques for use in ecological assessment' (Shawyer, 2011). Impact assessment and mitigation follows the guidance provided by CIEEM (2018) and the 'Bat Mitigation Guidelines' (Mitchell-Jones, 2004).

3. SURVEY RESULTS

3.1 Habitat description

3.1.1 Surrounding Habitat

- 8 The property, lvydene, is located in the village of Harrowbarrow in a rural area of east Cornwall. The surrounding landscape is dominated by mixed agriculture with traditional hedges and pockets of woodland.
- 9 Ivydene is located near six sites that are important for biodiversity (Table 2).



Site Name	Distance from Ivydene	Direction	Reason for designation		
Special Area of Conservation (SAC)					
Plymouth Sound and Estuaries SAC	c. 2.1km	East	Sandbanks which are slightly covered by sea water all the time, estuaries, large shallow inlets and bays, reefs, Atlantic salt meadows (<i>Glauco-Puccinellietalia</i> <i>maritimae</i>) and the shore dock (<i>Rumex</i> <i>rupestris</i>).		
Special Protection Area (SPA)					
Tamar Estuaries Complex SPA	c. 4.3km	South	Avocet (<i>Recurvirostra avosetta</i>) and Little Egret (<i>Egretta garzetta</i>) (both non- breeding).		
Site of Special Scientific Interest (SSSI)		l		
Greenscoombe Wood SSSI	c. 2.5km	North	Woodland flora and invertebrates. One of the few breeding sites in Britain for the nationally endangered Heath Fritillary butterfly (<i>Mellicta athalia</i>).		
Sylvia's Meadow SSSI	c. 1.7km	Northeast	Unimproved herb-rich pasture		
Tamar/Tavy Estuary SSSI	c. 2.1km	East	Botany assemblages, bird species and marine features and the presence of Otter (<i>L. lutra</i>) and Kingfisher (<i>Alcedo atthis</i>).		
Local Nature Reserve (LNR)					
Kit Hill LNR	c. 1.9km	Northwest	Flora and fauna associated with the heathland as well as the mining history.		

- 10 Ivydene is surrounded by ancient woodland; Comfort Wood, Cotehele Wood, Old Canal Wood, Greenscoombe Wood and Clitters Wood are among those closest to the property.
- 11 Bats are not specifically mentioned in the designated site descriptions, but the farmland, hedges and woodland surrounding lvydene all provide good foraging habitat for bats.

3.1.2 Ivydene

- 12 Ivydene is a partially rendered stone and block built semi-detatched house (Figure 1). The main roof is gabled and will not be impacted by the proposed development.
- 13 The conservatory that will be demolished (Figure 1 red box) is comprised of a mono-pitched roof of plastic corrugated sheeting, plastic fascia boards, plastic window frames with a single skin of blockwork below. There is no roof void and the plastic is all in good condition and fitted tightly to the wall of the house. All areas could be surveyed.
- 14 The roof that will be impacted by the proposed works (Figure 1 yellow box) is a mono-pitched roof of asbestos roof tiles with a wooden fascia board. All tiles are present and tightly fitted. The render goes up to the roof tiles on the end of the property with no gaps between the wall top and the tiles. The wooden fascia board is lifted in places, but there is no access to be space underneath the roof tiles as there is render up to the tiles.



15 Inside the roof that will be impacted by the proposed works is a single roof void that is lined with plastic sheeting. The sheeting is in good condition with no rips/tears. The void is boarded and there is insulation up to the eaves. All areas could be surveyed.



Figure 1 – Ivydene – South Elevation Conservatory - red box, roof to be impacted by the proposed works – yellow box

3.2 Visual bat survey results

16 No evidence of bats was found inside or outside of the property. All areas could be surveyed.

3.3 Nesting bird survey results and other considerations

17 There was no evidence of nesting birds inside or outside of the property.

4. RECOMMENDATIONS

- 18 No evidence of bats was found and it is considered unlikely that any evidence was overlooked as all areas could be surveyed. The building affected by the proposal has negligible habitat features that are likely to be used by roosting bats. No further surveys for bats are required.
- 19 In the unlikely event that bats are discovered during the works, they must not be handled, works must stop immediately and advice sought from Pan Ecology (Tel 07508 739931) or Natural England (Tel 0300 060 3900).
- 20 No evidence of nesting birds nests was found and it is considered unlikely that any evidence was overlooked. However, if the works are to be carried out during bird nesting season a thorough search for nesting birds should be carried out before works commence. Particular care should be taken in areas where evidence of nests may be concealed. If active nests are observed, then works should be delayed until dependant young have fledged.



- 21 The nests and eggs of all wild birds are protected against taking, damage or destruction under the Wildlife and Countryside Act 1981.
- 22 As ecological features can change over time it is recommended that this report is valid until 2nd October 2024.

5. ADDITIONAL RECOMMENDATIONS

- 23 As wildlife habitat should be enhanced and provided where possible, if the owners would like to provide for wildlife in their new development, then they could include an integral bee brick in the new porch (Figure 2), hang a bat box on the main house or hang a bird box in the garden to provide nesting opportunities for small birds.
- 24 The bee brick should be installed on a south-facing wall 1-2m above ground level. Bee bricks contain multiple cavities for bees to lay their eggs and are integral to a building. Ideally, the bat box would be a Woodcrete type of box (e.g. Beaumaris bat box or Eco Kent Bat Box) as they are more durable than the wooden ones and also more thermally stable. The best place for the bat box is high up and away from light sources where possible.



Figure 2 - Example bee brick



6. REFERENCES

BCT (2009). The National Bat Monitoring Programme. Annual Report 2009. The Bat Conservation Trust, London.

BCT (2011). The state of the UK's bats: National Bat Monitoring Programme Population Trends 2011. The Bat Conservation Trust, London.

Bat Conservation Trust (2011). Statement on the impact and design of artificial light on bats. Bat Conservation Trust, London.

BCT (2012). The National Bat Monitoring Programme. Annual Report 2011. The Bat Conservation Trust, London.

CBI [Cornwall Biodiversity Initiative] (2010) Cornwall's BAP Volume 4: Priority Projects: Species List 2010 (online).

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.

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

Department for Communities and Local Government, (2012). National Planning Policy Framework. London ISBN: 978-1-4098-3413-7

English Nature (2002). Bats in roofs: a guide for surveyors. English Nature, Peterborough, UK.

Hundt (2012). Bat Surveys – Good Practice Guidelines. Bat Conservation Trust, London, UK.

Joint Nature Conservation Committee (2004). Bat Worker's Manual (3rd Edition). Joint Nature Conservation Committee, Peterborough, UK.

JNCC and Defra (on behalf of the Four Countries' Biodiversity Group). (2012). UK Post-2010 Biodiversity Framework. [online] Available at: <u>http://jncc.defra.gov.uk/page-6189</u>

JNCC [Joint Nature Conservation Committee] (Online) Species of conservation concern UK http://jncc.defra.gov.uk/page-5335

JNCC [Joint Nature Conservation Committee] (Online) Nationally rare and nationally scarce species UK http://jncc.defra.gov.uk/page-3425

Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough, UK.

Natural Environment and Rural Communities Act (NERC) (2006) Species and habitat listed under S41 of the NERC Act 2006.

Office of the Deputy Prime Minister (ODPM) (2005). Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impacts within the Planning System. The Stationery Office Ltd. London.

Schofield, H.W. (2008). The Lesser Horseshoe Bat Conservation Handbook. The Vincent Wildlife Trust.

Shawyer, C. R. (2011) Barn owl survey methodology and techniques for ise in ecological assessment – Developing best practice in survey and reporting. IEEM, Winchester (updated 2012).

The Conservation of Habitats and Species Regulations 2010. HMSO, London.



The Natural Environment and Rural Communities Act (NERC) 2006. HMSO, London.

The Wildlife and Countryside Act 1981 (as amended). HMSO, London.

UKBP (2007). UK List of Priority Species. UK Biodiversity Partnership.

Williams C.A. and Cornwall Bat Group (2009) Bats. In CISBFR, Red Data Book for Cornwall and the Isles of Scilly. 2nd Edition. Croceago Press, Praze-an-Beeble.

Williams, C. (2010) Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build. RIBA, London.

Wray, S., Wells, D., Long, E. & Mitchell-Jones, T. (2010) Valuing bats in Ecological Impact Assessment. CIEEM In Practice Magazine (December 2010).



Appendix 1 Summary of relevant legislation, policies and case law

Bats

All British bats are European protected species and are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010. Together, this legislation makes it illegal to:

- Intentionally kill, injure or capture a bat.
- Intentionally or recklessly disturb a bat.
- Intentionally or recklessly damage, destroy or obstruct access to a place of shelter or breeding (for example, bat roosts), and this applies regardless of whether the species is actually present at the time (for example, a bat roost used in the winter for hibernation is protected throughout the year, even during the summer when it is not occupied).
- Possess or transport a bat or any part of a bat, unless acquired legally.
- Sell, barter or exchange bats, or parts of a bat.
- Intentionally handle a wild bat or disturb a bat whilst using a place of shelter/ breeding unless licensed to do so by the statutory conservation agency (Natural England).

Barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, greater horseshoe and lesser horseshoe bats are priority species for conservation on the UK BAP and protected under the NERC Act 2006. Barbastelle, pipistrelle, greater and lesser horseshoe bats are county priority BAP species (CBI, 2004).

Case Law

There are several case laws in Britain relating to the duty of developers and planning authorities with respect to wildlife, resulting in several key principles summarised in the table below:

Case / Appeal	Providing support for
Morge v Hampshire County Council (2011)	'Disturbance' under the Conservation Regulations 2010 applies to an activity likely to impact negatively on the local population of a European Protected Species.
R v Cheshire East Council 'The Woolley Case' (2009)	Regarding European Protected Species, Local Authorities must apply the 'three tests' under the Conservation Regulations 2010 when deciding on planning applications: that there is no satisfactory alternative, there is an appropriate reason for the development, and that the development will not affect the favourable conservation status of protected species present.
APP/P9502/A/08/2070105 (Appeal decision, Brecon, 2008)	Para 18: Local Planning Authorities cannot condition provision of a mitigation scheme; detailed mitigation must be provided prior to determination.



APP/C0820/A/07/2046271 (Appeal decision, Padstow, 2007)	Para 18: Full survey information must be provided prior to determination; not just for protected species, but also for BAP species (in this case corn buntings).
R v London Borough Council Bromley (2006)	Para 30: Environmental Impact Assessment required at outline planning stage.
R v Cornwall County Council 'The Cornwall Case' (2001)	Surveys for protected species cannot be conditioned; must be undertaken prior to determination.

Barn owls and other nesting birds

The nests and eggs of all wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981. Barn owls are given greater protection against disturbance while breeding under Schedule 1 of the Act.

National Planning Policy Framework 2012

The National Planning Policy Framework (NPPF) sets out national planning policy that is committed to minimising impacts on biodiversity and providing net gains in biodiversity where possible. Under NPPF, local planning authorities have an obligation to promote the preservation, restoration and recreation of Priority habitats, ecological networks and the protection and recovery of Priority species as identified under the Natural Environment and Rural Communities Act (2006). Section 118 of the NPPF also requires enhancements for biodiversity. The NPPF also recognises the wider benefits of ecosystem services.

