

## **WRITTEN EVIDENCE ON THE IMPACT ON BIODIVERSITY, NATURE AND THE ENVIRONMENT**

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Appeal Ref No: CAS-03423-V9Z8M3

Site:	Denbigh Quarry, Plas Chambres Road, Denbigh LL16 5US
Description:	Consolidating application for the extension of winning and working of limestone, importation of inert restoration material and restoration to amenity.
Appellant:	Chris Burgess
Representing:	Invited Party SOGS Dinbych, opposing the Quarry extension
Focus:	Impact on Biodiversity, Nature and the Environment

### **My Personal Background:**

- More than 60 years of experience in study of and teaching about the natural world.
- Secondary School Teacher, Llandudno (26 years)
- Advanced Diploma in Special Needs in Education
- Eco-Schools Coordinator at St David's College
- Climate Activist
- Friends of The Earth Ruthin
- Greenpeace

### **My involvement with the site:**

I have been involved in other community projects locally and felt it essential to save our green space, the Crest Mawr fields, from quarrying. I have been working with the other SOGS activists since 2024. I visit the area frequently and love it dearly.

I'm further motivated by my understanding of how devastating the loss of this green space will be for the already deprived community which borders the site.

I am not a specialist in planning law and procedures, so I write as a committed ecologist and educator.

### **Declaration:**

The evidence that I submit here is true and has been prepared and is given in accordance with the guidance of my professional institution, irrespective of by whom I

am instructed. I can confirm that the opinions expressed are my true professional opinions.

## **Contents**

### **1. Introduction**

In refusing permission for the Appellant's quarry extension DCC gave three reasons. This Written Evidence addresses Reason for Refusal 1: an unacceptably negative impact on protected species and the special characteristics and features of the Crest Mawr and Graig Quarry Sites of Special Scientific Interest.

The evidence focuses on survey methods, timing and the obligation to protect biodiversity.

### **2. Impact of the proposed Quarry Extension on Biodiversity and Rare & Endangered Species**

- 2.1 Government Policy context
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## **2. Impact of the proposed Quarry Extension on Biodiversity and Rare & Endangered Species**

### **2.1 Government policy context**

In launching the Welsh Government Net Zero Strategic Plan (2022) Dr Andrew Goodall, Permanent Secretary of the Welsh Government, spoke about:

- The government's commitment to mainstream the climate and nature emergency within all its activities
- The part the government will play in achieving net zero by 2030
- How these commitments demonstrate delivery on the promises of the Future Generations Act (2015)

- The government, as a large corporate body itself, leading by example on addressing the climate emergency
- Each one of us having a role, as an individual or employee, in decarbonising Wales through the choices we make

<https://www.gov.wales/sites/default/files/publications/2022-12/welsh-government-net-zero-strategic-plan.pdf>

The determination of this appeal presents an opportunity for a landmark decision demonstrating

- clear observance and implementation of these policies and strategies
- an exemplar approach to the value placed on nature and biodiversity
- commitment to taking care of the wellbeing of a whole community

PEDW Guidance Document: Planning, Listed Building & Conservation Area Appeals, states that *“At the heart of sustainable development is the simple idea of ensuring a better quality of life for everyone now and for future generations. Decisions about development take into account the public interest.”*

The strongly held and demonstrated view of our local community is that it is not in the public interest to lose 5 hectares of well used green space. Granting permission to fell irreplaceable trees and displace wildlife does not ensure “a better quality of life for everyone now and for future generations”. Protecting biodiversity is a necessity to secure basic living conditions, i.e. fresh air and clean water, adequate food, and wellbeing rooted in an intact natural environment.

Does  
government  
policy support  
choosing this,



Or more of this?



Photo credit: Just Mammals

## 2.2 Environmental protection requirement

Under EU Directive 2001/42/EC, enshrined in the Welsh Environmental Assessment of Plans and Programmes (Wales) Regulations 2004, Local Authorities are required to *‘provide for a high level of protection of the environment’* in considering plans for development likely to have **significant effects on the environment**. This mandates the provision of an Environmental Assessment by developers to ensure that the correct level of protection is provided. DCC considered that the protections afforded to the environment in the Appellant’s application were insufficient and quotes this legislation (as included in the Local Development Plan for 2018 -2033) in justification for their Reason for Refusal 1.

The Appellant’s Environmental Assessment is lacking in detail, uses less than optimal methods and favours the goals of the developers rather than protecting the environment.

## 2.3 Sustainable development necessity

DCC’s Sustainability Assessment of the Local Development Plan for 2018-2033 *‘promotes development which in itself is sustainable, as well as being situated in a sustainable location’*. See Appendix 1 for Definition of sustainability

The lateral extension of Denbigh Quarry is not a sustainable development – one which meets the needs of the present without compromising the ability of future generations to meet their own needs.

No matter what level of mitigation is put in place, for dormice, Peregrine falcons and bats there will be an immediate 100% loss of biodiversity and habitat – not the claimed eventual 10% gain. The only sustainable approach to this habitat loss is to replace it before it is lost. So, to build the bunds and establish new plantings around the proposed extension boundaries and allow these to mature for ten to 15 years before then beginning soil and habitat removal in the quarrying area.

In this way new wildlife corridors will be established to counteract the removal of existing habitat.

Mature and veteran trees (some over 100 years old) that provide roosting sites for bats will be lost and cannot be regenerated quickly. These displaced bats will be in competition with those on the remaining areas bounding the site, compromising their survival.

## 2.3 Environmental Assessment limitations

I draw on the content of Appellant’s documents Environmental Impact Assessment 25/04/2025 and Further ES Info 21/10/2024

A ‘walkover’ survey was conducted on 5<sup>th</sup> December 2024. This is a rapid appraisal of a site:

- to identify any ecological opportunities or issues
- to ensure that they do not delay a development programme
- to eliminate the need for complex further surveys
- may be all that is required by a planning authority on a simple site
- a cost-effective way to assess any ecological risks

Characterisation from <https://www.wildlifepartnership.co.uk/ecology-services/walkover-survey.html>

A mere 'walkover' is not suitable since this is a complex site with multiple ecological challenges. A survey in December cannot reliably locate and report on spring and summer flowering plants nor nesting and breeding animals, migratory or hibernating species. Although the full ES was conducted several years before, the effects of climate change and extreme weather may have contributed to habitat change in that time period and this has not been properly assessed. Between 2019 and 2024 there were 14 named storms in NE Wales and 3 extreme heat events (UK Met office data).

Restricting the ES to only a walkover survey could give the impression that the Appellant is more concerned with the potential short term financial consequences connected with time delay than with the longer-term unquantifiable detriment of not protecting the environment.

On 31<sup>st</sup> October 2024 Liam Toland Planning stated in an email to Richard Duggan from PEDW that

- Furthermore, regardless of the breeding bird surveys, due to the impacts of further delays, which could ultimately lead to the closure of the quarry, we consider that a start letter should be issued for the Appeal.

The term 'regardless of breeding bird surveys' shows clearly that regulations put in place to protect breeding birds on the site are suggested to be 'disregarded' in favour of the timely start of the Appeal. The phrase 'which could lead to the closure of the quarry' is highly emotive and misleading. We know from the continuing blasting and other data that there is sufficient rock to sustain quarry operations for at least another 3 years (and beyond). Please see Stephen Lloyd's Written Representation.

I will below describe the species at risk due to the proposed lateral extension

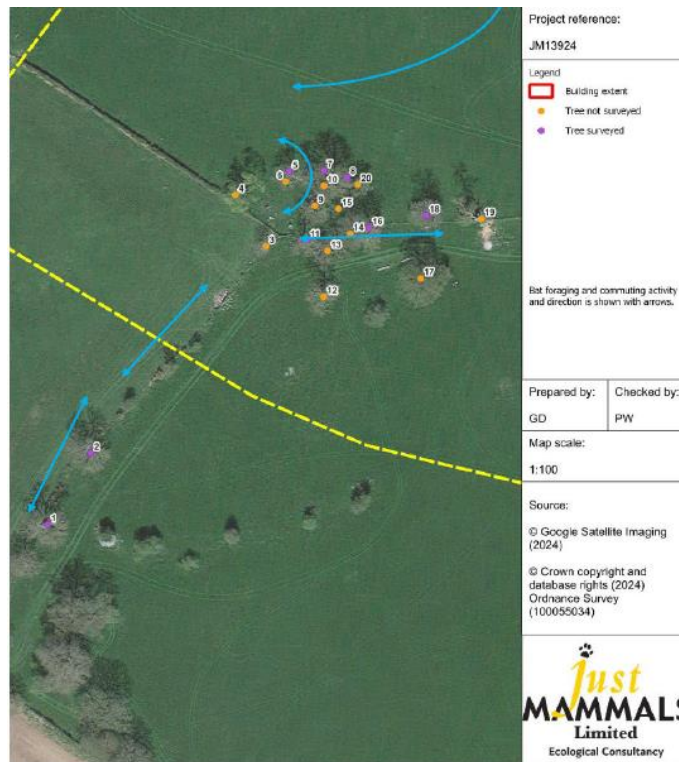
## 2.4 Bats

### Habitat

Grassland, woodland, habitat for insects, roosts and nesting sites upon which the whole of the food chain relies, will be lost if the quarry extension goes ahead. Habitat loss is one of the main threats to biodiversity.

The Bat Activity Survey 2019 notes that the proposed grassland, hedgerow, scattered trees and woodland that will be removed is an important foraging and commuting habitat for bats.

A hedgerow that has gaps still serves as a foraging and commuting habitat for bats as this is where insects live and emerge. In Figure 1 Survey Summary – Tree Locations and Bat Activity, p. 37 of the PDF, shows an ideal circular hunting ground for bats, bordered by the trees, the hedges and edge of the woodland.



Point 2.8 of the original bat survey 2019 included the existing quarry void in assessing the site for habitat suitability, relegating the surrounding trees and scrubland to suitable areas of foraging habitat in the wider area.

In assessing the quarry extension area for bat habitat, it is incorrect to include the existing quarry void (which contains only aquatic habitat and Peregrine nesting sites). The above habitat assessment is misleading. Due to hedgerows for foraging and the potential roosts and hibernating areas found in the mature trees of the extension area and boundaries, this offers a HIGH habitat quality for bats.

The guidelines state that if habitat quality is High more comprehensive surveys should be conducted. A walkover survey in December is insufficient. In fact, Just Mammals stated in their report, that it is sub-optimal to conduct habitat surveys in the winter. The provided surveys are not able to give a true picture of the bats foraging, roosting or passing through this site.

## Roosting

The damage described to trees at the site (split limbs in trees, loose bark, woodpecker holes, rot holes, hollow core) all indicate a high bat roost potential (see Appendix 2). Yet in the Just Mammals survey these are recorded as low or moderate.

Had the roost potential been correctly recorded as High then the surveys should definitely have been thoroughly updated for the appeal.

Although trees with high roost potential were identified outside the proposed extension boundary, these roosts would be unacceptably impacted by the nearby blasting and dust from the extended quarry.

## Survey validity

Guidelines from the Bat Conservation Trust and Chartered Institute of Ecology and Environmental Management suggest that roost surveys, hibernation and emergence/re-entrant surveys should be renewed after 12 months. Therefore, Just Mammals' claim that no new surveys should be carried out since there was no habitat change are misleading. By the time of the appeal hearing (August 2025) the thorough surveys will be 6 years old and completely out of date.

This omission combined with only a 'walkover' survey during hibernation time, leads to an unreliable survey result in need of updating.

## Biodiversity markers

One of the species of principal importance for biodiversity recorded is the noctule bat. Further evidence on the reliability of the observations made, see Appendix 3.

## 2.5 Reptiles

Not finding slowworms during the survey does not confirm their absence on the site. From October to March, they will be hibernating in leaf mulch and under stones or deadwood. They are not easily found even in sunny warm weather as they are very sensitive to noise and vibration when a person walks nearby.

## 2.6 Amphibians

No newts or lizards were reported during the walkover since they are in hibernation at that time of year. To confirm their presence, raking and sieving through grass and leaf mulch is required.

## 2.7 Hazel Dormice

These fields and woodlands provide an ideal habitat for dormice with plentiful food sources and ideal ground cover. These were surveyed using nest tubes alone, an unreliable method to detect this species. The most likely place to find dormice is woodland edge or scrub and surveys should be carried out early April – September. Placing these tubes in May, as was done in the survey, reduces the available time for a positive result due to the animals needing to become familiar with this new item in their

environment through a fair period of weathering to remove unfamiliar smells. “False positive” results from using nest tubes alone are widely known about. This can be proven when using simultaneous alternative methods that show dormouse presence when nest tubes indicate no dormice are present. The problem here is that dormice will frequently enter tubes without building nests. If no nests are built, a presence cannot be detected using nest tubes alone.

This suggests that, if the aim is to confirm presence of dormice, the method of using only nest tubes should be complemented or backed up by another method. The Pleydell Smithyman report acknowledges that there are other methods that could be used but does not mention what they are and or whether they are appropriate.

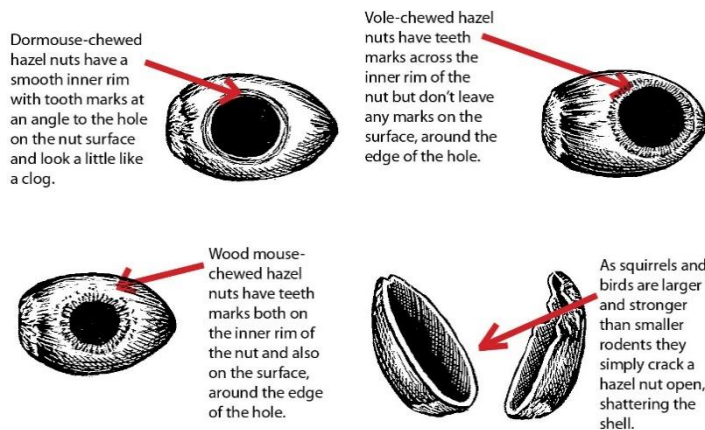
Therefore, the lack of evidence of dormice in this survey does not mean they are not there.

The well-known, far more dependable approach is using tracking tunnels, which only takes a fleeting visit for a dormouse to be detected. This gives a more accurate detection rate when compared with conventional nest tubes and boxes.

The presence of dormice can also be indicated by other means including searching for nibbled nut shells and cherry stones. Dormice leave a distinctive tiny, smooth hole in cherry stones and hazelnuts.

[PowerPoint Presentation](#) Guidance using Dormouse Footprint Tunnels

[Hazel Dormouse Conservation Handbook \(e-book\) — Mammal Society](#)



It can be argued that only the minimum of effort was made to find dormice on the site. It cannot reasonably be expected that they would be discovered in December during their hibernation period. So, the Just Mammals survey does not provide any updated evidence on this species.

Dormice are rare due to fracturing of their habitat areas, extensive removal of hedgerows and high sensitivity to change in their habitat and the climate. They are not easily able to move to new sites.

The mitigating measures suggested by the Appellant, including replanting, will not mitigate for the complete eradication of habitat, contributing further to the severe decline of this rare and protected animal.



## 2.8 Peregrine Falcon

Although no nest sites were observed during the survey that does not mean there is no possibility of nesting or that it has not happened in the past. These are monogamous birds, staying together for several breeding seasons, returning to the same nest site. It is perfectly plausible that the observed Peregrine had lost its mate and that is why there might not have been a nest on the quarry ledge in the summer.

The outer wall of the quarry has been undisturbed for a number of years since blasting cannot take place here as long as an extension is planned in this direction. Peregrines were recorded flying and especially ‘perching’ on the terraces, that makes the quarry not only a suitable but a DEFINITE habitat.

Indeed, Chris Burgess, the Appellant, has said, in a conversation with a SOGS member, that the quarry is proud to live in harmony with Peregrines who have nested on the ledges previously. Ending quarrying in 2028 and restoring the existing site would allow the resident Peregrines to thrive in an ideal and historic nesting habitat.

Extending the quarry will destroy the existing habitat for Peregrines 100%. An environmental net gain of 10% in the mitigation process is impossible to achieve for this priority bird species.

## 2.9 Farmland

The Proposed Scheme is expected to permanently affect 1.5 hectares of high-quality (Grade 2) and 2.5 hectares of good-quality (Subgrade 3a) agricultural land. Although these lands are classified as very high and high sensitivity respectively, the impact is considered low in magnitude. The overall residual adverse effects are assessed as minor and therefore not significant.

This assessment underplays the cumulative and long-term importance of losing high- and good-quality agricultural land. Grade 2 and Subgrade 3a soils are among the most productive and versatile, vital for food security and sustainable agriculture. Even small areas lost to development contribute to the gradual erosion of the national agricultural resource base. Labelling the permanent loss of such sensitive land as “not significant” ignores broader environmental, economic, and policy concerns, particularly in the context of increasing pressures on food production and land use.

Denbigh has already lost 12ha of good quality agricultural land to a housing development in the last year.

Wales has lost 90% of its grassland in the in the last century. As well as providing food, soil locks up carbon stores which take thousands of years to build up. Removal of this and release into the atmosphere cannot be mitigated for. The Appellant’s soil assessment (CD1.31 ES Appendix 12) concludes that the removal, storage and reuse of 4.5ha of soil has a minor, non-significant residual, direct, permanent effect on this agricultural land.

During the 30 years of quarrying what that means is no sheep or cattle grazing the land during that time and contributing to food stocks; no maintenance of the soil structure and biodiversity or the grassland quality through foraging and dung production; no hay or silage made thus increasing the use of synthetic feeds for stock.

Protecting existing quality soil land should be the first priority in development.

## 2.10 Wildlife Corridor

The Environment (Wales) Act 2016 places a requirement on public authorities to maintain and enhance biodiversity within the proper exercise of their functions. The duty of biodiversity and ecosystems resilience (Section 6) includes ensuring connectivity between habitats and supporting ecological networks eg wildlife corridors.

In addition, Planning Policy Wales (Edition 12) in Section 6.4 states that networks of green infrastructure, including wildlife corridors, should be protected, enhanced, and, where appropriate, restored, reminding authorities of the need to protect connectivity between habitats.

What is very clear from the Appellant's map plans is that an important wildlife corridor will be destroyed connecting WOM21 Parkland area of High Sensitivity with Priority Habitat: Lowland Calcareous Grassland and Priority Habitat: Parkland. In addition, the woodland corridor connecting two areas of Ancient Woodland will be lost.

Technical Advice Note 5 (Nature conservation) supports the use of the mitigation hierarchy: Avoid → Minimise → Restore → Compensate. This has not even been mentioned in any of the Appellant's ecological documentation.

### **3. Conclusion**

Reason for Refusal 3 quoted by DCC in their Decision Notice, can be readily upheld and defended in terms of:

- questionable survey methods,
- expired environment surveys
- unsatisfactory mitigation measures
- lack of proper scrutiny in favour of biodiversity protection and enhancement throughout the process

Wales is one of the most nature depleted countries on the planet, ranking 224<sup>th</sup> out of 240 countries in the Natural History Museum's Biodiversity Intactness Index. It's in the bottom 10% globally. In the last 30 years Welsh wildlife has declined by 20% on average. Nearly one in six of native species are now threatened with extinction, with terrestrial mammals, such as the dormouse, most seriously threatened.

The depth of this countrywide nature emergency cannot be ignored. Denbighshire declared a climate emergency in 2019 and it's resulting Climate & Nature Strategy (2021–2030) sets goals to become ecologically positive by strategically enhancing biodiversity.

Against this background it beggars belief that the Appellant can even seek to propose nature destruction on the scale suggested.

In addition, PEDW, as a public body, is mandated to maintain and enhance biodiversity within the proper exercise of its functions. In this case that duty can easily be discharged by upholding the original decision of DCC and rejecting the Appellant's case.

At this critical moment we must all act in favour of nature as mandated by moral principles as well as legislation.

## Appendix 1 What does sustainability mean?

- *“If something is sustainable, it can be carried on for a long period of time.”*
- *Being sustainable means doing little or no harm to the environment.”*

[What is sustainability? - BBC Bitesize](#) GCSE Resource

### Three Pillars of Sustainability

#### Environmental Sustainability

- Minimising impacts on biodiversity, landscapes, water, air, and soil.
- Promoting low-carbon and climate-resilient development (e.g., energy efficiency, green infrastructure).
- Encouraging reuse of brownfield sites over greenfield land.

#### Social Sustainability

- Creating healthy, safe, and inclusive communities.
- Providing affordable housing, access to services, education, and public transport.
- Encouraging community involvement in planning processes.

#### Economic Sustainability

- Supporting local employment and business opportunities.
- Ensuring developments are viable and support long-term growth without resource overuse.
- Integrating transport and infrastructure to boost connectivity and economic efficiency.

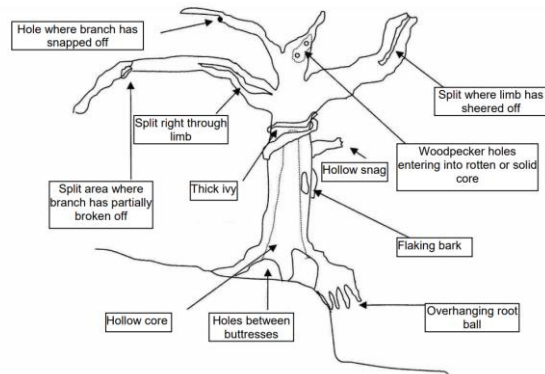
United Nations (2002). *World Summit on Sustainable Development: Plan of Implementation*

Also: WCED (1987). *Our Common Future (The Brundtland Report)*

## Appendix 2 Assessing tress for bat roost potential

[https://cdn.bats.org.uk/uploads/pdf/Resources/For-professionals/Bat-Survey-Guidelines-4th-edition-AMENDED-27.03.24.pdf?v=1711530492& gl=1\\*1aahsne\\* ga\\*MTUwNDYxOTg2Mi4xNzM2NjEyOTk2\\* ga G28378TB9V\\*MTczNjYxMjk5NS4xLjEuMTczNjYxMzA3OS4wLjAuMA..](https://cdn.bats.org.uk/uploads/pdf/Resources/For-professionals/Bat-Survey-Guidelines-4th-edition-AMENDED-27.03.24.pdf?v=1711530492& gl=1*1aahsne* ga*MTUwNDYxOTg2Mi4xNzM2NjEyOTk2* ga G28378TB9V*MTczNjYxMjk5NS4xLjEuMTczNjYxMzA3OS4wLjAuMA..)

Figure 1: Potential bat roost sites in trees



A tree forms an essential part of an often complex ecosystem that provides a variety of habitats for a range of different wildlife species, including bats. Of the sixteen bat species in the UK, thirteen are known to roost in trees. Some bat species rely exclusively on trees for roost sites, whilst others use them for part of the year. All sixteen species forage in woodland and along woodland edges.

Any tree can be used as a bat roost, as long as it provides shelter, e.g. in the form of splits, cracks, holes and cavities in the trunk and branches, loose bark and ivy cover (Figure 1). Roosts can be at any height in the tree, although upper trunk and branches are probably more common.

[https://www.dorsetcouncil.gov.uk/documents/35024/283707/2a.\\_Bats\\_\\_\\_Trees\\_Advice\\_Note.pdf/6c839632-c207-d6c1-b5d6-37a8fa27d643](https://www.dorsetcouncil.gov.uk/documents/35024/283707/2a._Bats___Trees_Advice_Note.pdf/6c839632-c207-d6c1-b5d6-37a8fa27d643) p.1 Quote

### 1. Assess tree for bat potential

HIGH POTENTIAL	MEDIUM POTENTIAL	LOW POTENTIAL
WOODPECKER HOLES CRACKS/CREVICES LOOSE OR FLAKING BARK MEDIUM – DENSE IVY COVER DEADWOOD IN CANOPY OR STEM SNAGGED BRANCHES HOLLOW STEM OR LIMB HOLE B/T BUTTRESSES/HOLLOW CORE	FEW SMALL CRACKS OR CREVICES LOW IVY COVER DEADWOOD IN CANOPY OR STEM	NO CRACKS/CREVICES NO FLAKING BARK LOW/NO IVY COVER

From Bat Survey Guidelines, [Bat Survey Guidelines 23](#).

### Appendix 3 Noctule Bat

*At least five species of bats were detected foraging and commuting around the trees: soprano pipistrelle, common pipistrelle, noctule, brown long-eared bat and lesser horseshoe bat. Regular foraging activity was also recorded around the tree canopy.*

*The majority of activity was from common and soprano pipistrelle bats. A single commuting pass from a lesser horseshoe bat was recorded. Socialising activity was also recorded from common and soprano pipistrelle bats.*

*“The noctule bat is classified as a priority species in the UK Biodiversity Action Plan. It is also protected by law in the UK under the Wildlife and Countryside Act 1981. The noctule bat is often mistaken for a swift when in flight, as they fly so high up. “*

<https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/animals/mammals/noctule-bat/>

Even if this species of bat is argued by the surveyors as not rare – contradicting the existing protection status noctules enjoy, because it is claimed to be widespread in the UK - that does not justify disturbing their habitat and wipe out their potential roosting sites by removing the trees in our green space in Denbigh.