Preliminary Ecological Appraisal Report

Site: Argoed High School, Bryn Road, Mold
Ref: 20178
Client: HSP Consulting

(Mail) 2nd Floor | 1 Hunters Walk | Canal Street | Chester | CH1 4EB

0333 123 7080 | info@indigosurveys.co.uk

www.IndigoSurveys.co.uk

Author:
Andy Warren BSc (Hons), MA (LM), Tech Cert (Arbor A), MCIEEM, TechArborA

CONTENTS

Page No

SUMMARY

At Argoed High School, Bryn Road, Mold, planning permission is being sought for the redevelopment of the site.

In May 2020, Indigo Surveys Ltd was instructed to carry out a Preliminary Ecological Appraisal of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by the proposed development.

Ecological data from COFNOD, the ecological database for Denbighshire, revealed two statutory sites within 1.0 km of the site; Buckley Claypits and Commons SSSI, Deeside and Buckley Newt sites Special Area of Conservation, whilst there were two non-statutory sites:

- Coed Argoed Local Wildlife Site
- Bryn y Baal Quarry RIGS

Due to the distances between the land and these sites, the presence of significant barriers including main roads and buildings, and the lack of direct connectivity, any proposed development is unlikely to impact adversely on these sites or the ecological communities therein.

The desk study also revealed a number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.0 km radius of the site.

None came from the site itself, but within 1.0 km there were a number of bat records for the area. Species included Lesser Horseshoe *Rhinolophus hipposideros*, Noctule *Noctula nyctalus*, Natterer's Bat *Myotis nattereri*, Common Pipistrelle *Pipistrellus pipistrellus*, Brown Long-eared Bat *Plecotus auritus* and unknown bats.

Other mammal records included Badger *Meles meles*, Hedgehog *Erinaceus europaeus*, Brown Hare *Lepus europaeus* and Polecat *Mustela putorius*, all of which came from beyond barriers such as roads and houses.

Amphibian and reptile records included Great Crested Newt *Triturus cristatus*, Smooth Newt *Lissotriton vulgaris*, Palmate Newt *Lissotriton helveticus*, Common Frog *Rana temporaria*, Common Toad, Common Lizard *Vivipara zooctopa* and Slow Worm *Anguis fragilis*, all of which came from beyond 500 metres from the site.

Bird records included Song Thrush *Turdus philomelos*, Starling *Sternus vulgaris*, Dunnock *Prunella modularis* and Kestrel *Falco tinnuculus* amongst others.

The Phase 1 visit took place on 22nd May 2020, in mild, bright conditions.

The site encompassed the buildings and grounds of Argoed High School.

The grounds were dominated by large playing fields sport pitches/courts and amenity grassland lawns.

Secondary habitats included a number of mixed scattered trees, sections of intact hedge and hedge with trees and a narrow, culverted brook.

School buildings,, carparks and walkways represented buildings and hard standing.

No rare vascular plants were found, and all species recorded were common and widespread.

During the site visit just two species of birds were observed, both of which were Species of Low Conservation Concern (RSPB Green list).

Bird nesting opportunities within the survey area were plentiful, with scattered trees and hedgerows providing nesting habitat.

As all in-use bird's nests and their contents are protected from damage or destruction, any tree or shrub removal or works which may affect a nest should be undertaken outside the period 1st March to 31st August inclusive. If this time frame cannot be avoided, a close inspection of the trees, shrubs or structures to be removed should be undertaken prior to clearance. Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

None of the trees contained features such as woodpecker holes, fissures and exfoliating bark, that provided potential for bat roosting and/or hibernation.

An external inspection of the buildings revealed one of the buildings had medium suitability for roosting and/or hibernating bats.

As such, it is recommended a minimum of two emergence survey is undertaken on the medium suitability building in the period May to September (inclusive). The surveys should be spaced at least two weeks apart and include one dawn re-entry survey.

The site itself had relatively low value to foraging bats, as the site was largely open, although marginal hedgerows and trees provided some better bat foraging habitat.

There were no signs or evidence of Badger activity, whilst the small brook offered relatively poor/unsuitable habitat for Otters and Water Vole.

There were no still water or other wetland features on the site, and as such there was negligible potential for amphibians.

The site offered poor habitat for reptiles due to the frequent mowing regime and lack of suitable cover.

Despite the presumed absence of reptiles and amphibians, care will be taken when carrying out earthworks, as small mammals could be present. Any small mammals disturbed or uncovered will either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

Since the site was dominated by close mown amenity grassland, with limited floristic diversity, it was concluded that there was low potential for significant invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. Indeed, none were noted.

If excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

1. INTRODUCTION

1.1 Background and survey objectives

At Argoed High School in Mold, planning permission is being sought for the redevelopment of the site.

In May 2020, Indigo Surveys Ltd was instructed to carry out a Preliminary Ecological Appraisal of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by the proposed development.

Ecological data from COFNOD, the ecological database for Denbighshire, revealed a number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.0 km radius of the site, along with a small number of statutory and non-statutory wildlife conservation sites.

1.2 Site description

The site encompassed the buildings and grounds of Argoed High School.

The grounds were dominated by large playing fields sport pitches/courts and amenity grassland lawns.

The amenity grassland comprised a short sward of Perennial Ryegrass *Lolium perenne*, Creeping Fescue *Festuca rubra*, and Meadow-grasses *Poa spp*.
Forbs amongst the sward included Dandelion *Taraxacum section vulgare*, White Clover *Trifolium pratense*, Daisy *Bellis perennis*, Great Plantain *Plantago major* and Ribwort Plantain *Plantago lanceolata*.

Secondary habitats included a number of mixed scattered trees, sections of intact hedge and hedge with trees and a narrow, culverted brook.

The trees included Sessile Oak *Quercus petraea*, Sycamore *Acer psuedoplatanus* Whitebeam *Sorbus aria*, Lombardy Poplar *Populus nigra italica*, Red Western Cedar *Thuja plicata* and Larch *Larix sp.* amongst others
.
The intact hedgerows and hedges with trees comprised Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Field Maple *Acer campestre*, Elder *Sambucus nigra*, English Oak *Quercus robur*, Sycamore, Bramble *Rubus fruticosus* and Common Nettle *Urtica dioica*.

School buildings, carparks and walkways represented buildings and hard standing.

No rare vascular plants were found, and all species recorded were common and widespread.

The Ordnance Survey Grid Reference is centred on the middle of the site.

1.3 Proposed works

It is understood that the site is to be redeveloped.

(Mail) 2nd Floor | 1 Hunters Walk | Canal Street | Chester | CH1 4EB
e: info@indigosurveys.co.uk | t: 0333 123 7080

2. METHODOLOGY

2.1 Desk study

A detailed desk study was undertaken to determine the nature conservation designations and protected species that had been recorded within a 1.0 km radius of the site. This involved contacting statutory and non-statutory organisations, and then assimilating and reviewing the data provided.

The consultees for the desk study were:

- Multi Agency Geographic Information (MAGIC) website www.magic.gov.uk;
- National Biodiversity Network Gateway website;
- COFNOD.

2.2 Habitat survey

A Phase 1 Habitat Survey was carried out across the whole of the survey site. It was conducted using standard JNCC (2003) techniques and methodologies.

The Phase 1 visit took place on 22nd May 2020, in warm, dry conditions.

2.3 Protected species survey

During the surveys the potential for other protected and important species was assessed. This included European Protected Species, legally protected species and Local Biodiversity Action Plan Species (and habitats).

2.4 Constraints

There were no constraints, as the survey was carried out at the optimum time of the year in good weather conditions.

3. RESULTS

3.1 Desk study

3.1.1 Designated sites

Statutory Sites

Ecological data from COFNOD, the ecological database for Denbighshire, revealed two statutory sites within 1.0 km of the site;

- Buckley Claypits and Commons SSSI
- Deeside and Buckley Newt sites Special Area of Conservation

Non-Statutory Sites

The desk study also revealed there were two non-statutory sites within 1.0 km of the site;

- Coed Argoed Local Wildlife Site
- Bryn y Baal Quarry RIGS

Due to the distances between the land and these sites, the presence of significant barriers including main roads and buildings, and the lack of direct connectivity, any proposed development is unlikely to impact adversely on these sites or the ecological communities therein.

3.1.2 Protected species

The desk study also revealed a number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.0 km radius of the site.

The desk study also revealed a number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.0 km radius of the site.

None came from the site itself, but within 1.0 km there were a number of bat records for the area. Species included Lesser Horseshoe, Noctule, Natterer's Bat, Common Pipistrelle *Pipistrellus pipistrellus*, , Brown Long-eared Bat and unknown bats.

Other mammal records included Badger, Hedgehog, Brown Hare and Polecat, all of which came from beyond barriers such as roads and houses.

Amphibian and reptile records included Great Crested Newt, Smooth Newt, Palmate Newt, Common Frog, Common Toad, Common Lizard and Slow Worm, all of which came from beyond 500 metres from the site.

Bird records included Song Thrush, Starling, Dunnock and Kestrel amongst others.

3.2 Habitat survey

3.2.1 Habitat descriptions

The following habitats were recorded across the site:

- Scattered mixed trees;
- Amenity grassland;
- Running water (brook);
- Intact hedge and hedge with trees;
- Buildings and hard standing.

These are shown on the Phase 1 Habitat Survey map in Appendix 1, with the target notes (where applicable) in Appendix 2.

Scattered mixed trees

Across the site were a number of mature and semi mature scattered mixed trees (Figs. 1 and 2). The trees included Sessile Oak, Sycamore, Whitebeam, Lombardy Poplar, Red Western Cedar and Larch amongst others.

Figs. 1 & 2 Scattered trees

Amenity grassland

The amenity grassland comprised a short sward of Perennial Ryegrass, Creeping Fescue, and Meadow-grasses (Figs. 3 and 4 - overleaf).
Forbs amongst the sward included Dandelion, White Clover, Daisy, Great Plantain and Ribwort Plantain.


Figs. 3 & 4 Amenity grassland

Running water

A small, tree lined, culverted brook ran across the site (Fig. 5).

Fig. 5 Running water

Intact hedge and hedge with trees

The intact hedgerows and hedges with trees comprised Hawthorn, Blackthorn, Field Maple, Elder, English Oak, Sycamore, Bramble and Common Nettle (Figs. 6 and 7).


Figs. 6 & 7 Intact hedge and hedge with trees

Buildings and hard standing

School buildings, carparks and walkways represented buildings and hard standing (Figs. 8 and 9).

Figs. 8 & 9 Buildings and hard standing

3.2.2 Flora

The botanical composition of each habitat was typical, and all species recorded were common and widespread.

No rare vascular plants were found.

3.3 Protected species survey

3.3.1 Bats

None of the trees contained features such as woodpecker holes, fissures and exfoliating bark, that provided potential for bat roosting and/or hibernation.

An external inspection of the buildings revealed one of the buildings had medium suitability for roosting and/or hibernating bats (Figs. 10 and 11 – Target Note 1).

Figs. 10 & 11 Building with medium suitability for bats.

The site itself had relatively low value to foraging bats, as the site was largely open, although marginal hedgerows and trees provided some better bat foraging habitat.

3.3.2 Badgers

There were no signs of Badger *Meles meles* activity.

3.3.3 Otters

No suitable habitat for Otter *Lutra lutra* was present within the survey area.

3.3.4 Water Voles

No suitable habitat for Water Vole *Arvicola amphibius* was present within the survey area.

3.3.5 Birds

During the site visit just two species of birds were observed, both of which were Species of Low Conservation Concern (RSPB Green list).

Bird nesting opportunities within the survey area were plentiful, with scattered trees and hedgerows providing nesting habitat.

A full list of species observed is given in Appendix 3.

3.3.6 Reptiles

The site offered poor habitat for reptiles due to the frequent mowing regime and lack of suitable cover.

3.3.7 Great Crested Newts

There were no still water or other wetland features on the site and as such the site had negligible potential for amphibians.

3.3.8 Invertebrates

Since the site was dominated by close mown amenity grassland it was concluded that there was low potential for significant invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. Indeed, none were noted.

3.3.9 Other species

No other protected or LBAP species were observed during the site visit.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Site evaluation

The site was considered to be of low value to wildlife, as it was dominated by close mown amenity grassland/playing fields with relatively low floristic diversity.

However the scattered trees and hedgerows had potential to support nesting and foraging birds.

None of the trees contained features such as woodpecker holes, fissures and exfoliating bark, that provided potential for bat roosting and/or hibernation.

An external inspection of the buildings revealed one of the buildings had medium suitability for roosting and/or hibernating bats.

The site itself had relatively low value to foraging bats, as the site was largely open, although marginal hedgerows and trees provided some better bat foraging habitat.

There was no still water or other wetland features on the site and as such the site had negligible potential for amphibians.

The site offered poor habitat for reptiles due to the frequent mowing regime and lack of suitable cover.

There were no signs of Badger activity and no suitable habitat for Otters or Water Voles, whilst there was negligible potential for significant invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan.

4.2 Possible impacts of proposed work and recommendations

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree or shrub removal or works which may affect a nest should be undertaken outside the period 1st March to 31st August inclusive. If this time frame cannot be avoided, a close inspection of the trees, shrubs or structures to be removed should be undertaken prior to clearance.

Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

An external inspection of the buildings revealed one of the buildings had medium suitability for roosting and/or hibernating bats.

As such, it is recommended a minimum of two emergence survey is undertaken on the medium suitability building in the period May to September (inclusive). The surveys should be spaced at least two weeks apart and include one dawn re-entry survey.

Despite the presumed absence of reptiles and amphibians, care will be taken when carrying out earthworks, as small mammals could be present. Any small mammals disturbed or uncovered will either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

If excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

4.3 Further surveys

If any tree or shrub removal or works cannot be timed appropriately to avoid the bird nesting period (considered to be March to August inclusive), then further surveys for nesting birds will be required.

If the medium suitability building is affected by the proposals, it is recommended a minimum of two emergence survey is undertaken on the medium suitability building in the period May to September (inclusive). The surveys should be spaced at least two weeks apart and include one dawn re-entry survey.

5. REFERENCES

Bat Conservation Trust, 2016. *Bat Surveys – Good Practice Guidelines. 3rd edition*. Bat Conservation Trust, London.

English Nature, 2004. *Bat mitigation guidelines*. English Nature, Peterborough.

Fitter R., Fitter A. & Blamey, M., 1983. *The Wildflowers of Britain and Northern Europe*. Collins, London.

Fitter R. & Fitter A., 1984. *Grasses, Sedges, Rushes & Ferns of Britain and Northern Europe*. Collins, London.

JNCC, 2003. *Handbook for Phase 1 habitat survey – a technique for environmental audit (revised reprint).* Joint Nature Conservation Committee, Peterborough.

Langton, T., Beckett, C. And Foster, J., 2001. *Great Crested Newt: Conservation Handbook.* Froglife, Suffolk.

Mitchell-Jones A. J. & McLeish, 2004. *Bat Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

Natural England, 2007. *Badgers and Development*. Natural England, Peterborough.

Scottish Natural Heritage, 2007. *Badgers and Development*. Scottish Natural Heritage, Edinburgh.

Stebbings R.E., 1986. *Which bat is it?* The Mammal Society and The Vincent Wildlife Trust, London.

The Vincent Wildlife Trust, 2003. *The Bats of Britain and Ireland*. The Vincent Wildlife Trust, Ledbury.

APPENDICES

Appendix 1: Phase 1 Habitat Survey Map

Appendix 2: Target Notes

Appendix 3: Bird species list

Appendix 4: Relevant legislation

(Mail) 2nd Floor | 1 Hunters Walk | Canal Street | Chester | CH1 4EB
e: info@indigosurveys.co.uk | t: 0333 123 7080

Appendix 1: Phase 1 Habitat Survey Map

(Not to scale)

Legend

Survey boundary	Running water	Target Note
Amenity grassland	Intact Hedge	
Scattered mixed trees	Buildings/hard standing	

Appendix 2: Target Notes

Target Note 1: External gaps on building – medium suitability building.

(Mail) 2nd Floor | 1 Hunters Walk | Canal Street | Chester | CH1 4EB
e: info@indigosurveys.co.uk | t: 0333 123 7080

Appendix 3: Bird species list

Common name	Latin name
Wood Pigeon	*Columba palumbus*
Carrion Crow	*Corvus corone corone*

Appendix 4: Relevant legislation

4.1 – Birds

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981. There are penalties for:

- *Killing, injuring or capturing them, or attempting any of these;*
- *Taking or damaging the nest whilst in use;*
- *Taking or destroying the eggs.*

4.2 – Bats

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- *Intentionally or deliberately kill, injure or capture (or take) bats;*
- *Deliberately disturb bats (whether in a roost or not;*
- *Recklessly disturb roosting bats or obstruct access to their roosts;*
- *Damage or destroy roosts;*
- *Possess or transport a bat or any part of a part of a bat, unless acquired legally;*
- *Sell (or offer for sale) or exchange bats, or parts of bats.*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal…uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

(Mail) 2nd Floor | 1 Hunters Walk | Canal Street | Chester | CH1 4EB
e: info@indigosurveys.co.uk | t: 0333 123 7080