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Landscape, Arboricultural & Ecological Solutions
for the Built Environment

Preliminary Ecological Appraisal

Uldale View, Egremont

Ref: P.1723.22

June 2023

(see revision dates below)

Rev	Date	Details
A	4th May 2023	General updates
B	26th June 2023	Updates following site visit

This document contains sensitive information regarding the location of a badger activity . The report is issued in confidence and on the basis that the material will not enter the public domain

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Preliminary Ecological Appraisal

Of

Uldale View, Egremont, CA22 2LE

For

Gleeson Homes

26 June 2023

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EXECUTIVE SUMMARY

A Preliminary Ecological Appraisal has been carried out at Uldale View, Egremont, CA22 2LE on 25th August 2022 by Liz Kenyon. The assessment comprised a desk study and biological records search, as well as a site walkover survey in order to map habitat types. The survey was extended to assess the potential for protected species to use the site. The assessment provides baseline data as to current site conditions and where appropriate allows recommendations to be made in respect of further potential work in order to satisfy current wildlife legislation.

Assessed against the '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' 2nd edition (2018), the habitats range in ecological value from negligible to within the zone of influence of the site**.** The majority of the habitats within the site will be lost within the proposals, however pockets of open space will be created in the central areas of the site. An area of Public Open Space (POS) and attenuation basin are proposed for the eastern sector of the site. As the habitats to be lost to the proposals are small in area and not of high ecological value it is considered that their loss can be mitigated for and the proposals will not adversely affect the ecological value of the wider area, provided the recommendations detailed below are followed.

The site comprises agricultural fields (F1 & F2) that were planted with agricultural crops. The full site is bound by species poor hedgerows with tall ruderal vegetation present to the field margins. A ditch (D1) lines the northern boundary of F2 and scattered trees and tall ruderal vegetation is present within the bank areas.

An updated walkover survey was carried out by Liz Kenyon on 21st June 2023, an inspection of ditch D1 was also undertaken to assess the watercourses suitability to support otter.

If the recommendations below are followed these species will not be adversely affected by the proposals.

- If works have not begun by August 2024, an updated site visit will be required to assess the habitats within the site;
- Preliminary bat roost assessment of trees that will be lost to the proposals to determine the suitability of any features that may be present to support a bat roost and to inform further recommendations if required;
- Production and implementation of a Construction Environmental Management Plan (CEMP) to ensure the River Ehen, ditch D1 and Florence Mine Site (SSSI) are protected during the construction phase;
- Implementation of a hedgehog, badger and mammal RAMS to avoid any harm to this species during the proposed works;
- Implementation of an amphibian RAMS to avoid any harm to this species during the proposed works.
- Precautionary check for invasive prior to works commencing;
- Enhancing the site for species through appropriate landscape planting that includes native, species rich hedgerows, trees and areas of wildflowers plus provision of integrated bat and bird features within newly constructed buildings;
- Provision of species within the landscaping plans to provide forage and refuge for red squirrel;
- SUDS features to include native planting to enhance the ecology and biodiversity of the proposed site;
- Production of the Defra Metric Biodiversity Net Gain Calculations to minimise impacts on biodiversity and provide net gains in biodiversity;
- Production of a Management Plan to ensure the long-term commitments to manage the planting, protection and enhancement of biodiversity in and around a new development site; and
- Vegetation clearance or pruning should be undertaken outside of the nesting bird season (1st March to 31st August Inclusive) to avoid any impact on breeding birds. Or a nesting bird check undertaken by a suitably experienced ecologist should be undertaken immediately prior to works commencing.

The site provides habitat for birds, bats, red squirrel, amphibians, badger, hedgehog and other small mammals. Habitats on site will be lost to the proposals. There is likely to be low impacts on the local ecology due to the proposals if the recommendations within section 6 are implemented.

1.0 Introduction

Ascerta has been instructed by Gleeson Homes to carry out a Preliminary Ecological Appraisal of the land at Uldale View, Egremont, CA22 2LE (hereafter referred to as the site). The site OS grid reference is NY007100 and the What3Words reference is prove.spreading.fines . The extent of the site is displayed in photograph 1.1 below.

Photograph 1.1: Extent of site

The site was visited on 25th August 2022 and 21st June 2023 by Liz Kenyon when Preliminary Ecological Appraisals of the site, which includes an assessment of the potential for protected species to be using the site or surroundings, was carried out in accordance with the *Handbook for Phase 1 Habitat Survey: a Technique for Environmental Audit* (*JNCC, 2010*). The report was prepared following methods detailed in the CIEEM '*Guidelines for Ecological Impact Assessment in the UK and Ireland'* (2018) and '*Guidelines for Ecological Report Writing*' (2017). This report presents the results of the survey including evaluation of habitats on site and potential for protected species to be using the site. The report includes recommendations for further actions where applicable in order to satisfy current wildlife legislation and to achieve our client's objectives. Relevant legislation is detailed within Appendix 4.

The site comprises agricultural fields (F1 & F2) that are planted with agricultural crops. The full site is bound by species poor hedgerows with tall ruderal vegetation present to the field margins. A ditch (D1) lines the northern boundary of F2 and scattered trees and tall ruderal vegetation is present within the bank areas.

Our client seeks planning consent to redevelop the site for residential dwellings with associated access roads. Areas of POS and attenuation ponds will be created to the east and north, along with a wetland area to the north-western section of the site.

2.0 Objectives

Our client's objectives are to assess the potential ecological constraints of the proposed development site.

Our objectives are as follows:

- Identify and evaluate any features of ecological value and the potential of the site to support protected species based on the walkover survey and biological records search;
- Identify designated sites within 2km of the site;
- Review protected species records within 2km of the site;
- Map the habitats within the site using JNCC (2010) methods;
- Provide recommendations for further species-specific surveys and mitigation measures where current legislation requires;
- Provide recommendations that seek to enhance the ecological value of the site;
- Provide recommendations to assist our clients in achieving their objectives whilst satisfying current wildlife legislation.

3.0 Survey Methods

The Preliminary Ecological Appraisal involved the collection and review of data from a desk study and field survey along with assessment of the value of the habitats following CIEEM guidelines.

3.1 Desk Study

A review of the designated sites and habitats within 2km of the site has been undertaken in September 2022 and June 2023 using the Multi-Agency Geographic Information for the Countryside (MAGIC) and the Natural England websites.

A review of UK and Local priority species and habitats known to occur within 2km of the site has been undertaken in September 2022 and June 2023; using the Joint Nature Conservation Committee website, Multi-Agency Geographic Information for the Countryside (MAGIC) and local records Cumbria Biodiversity Data Centre (CBDC) (Appendix 5).

3.2 Field Survey

Walkover surveys of the site were conducted on 25th August 2022 and 21st June 2023 by Liz Kenyon when the habitat types and features of ecological interest were identified and mapped in compliance with the Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit (*JNCC, 2010*). The survey methods involve the recording and mapping of all habitat types and ecological features present on site, including the identification of the main species present and examination of the potential for any protected species. Habitats were mapped and target notes made for any interesting features.

The surveys particularly focused on the following species and habitat features:

- Mammals (badgers, bats, otter and red squirrel);
- Birds;
- Amphibians and reptiles;
- Invertebrates;
- Hedgerows and boundaries;
- Invasive plant species; and
- Plant communities and trees.

Weather conditions on 25th August 2022 during the survey were warm (17ºC), dry (6/8 cloud cover) with a F0 (Beaufort Scale) calm air, therefore appropriate for this type of survey.

Weather conditions on the 21st June 2023 during the survey were warm (18ºC), dry (4/8 cloud cover) with a F0 (Beaufort Scale) calm air, therefore appropriate for this type of survey.

3.3 Bat Survey Methods

The survey methods followed the guidelines set out by the Bat Conservation Trust Bat Surveys for Professional Ecologists Good Practice Guidelines – 3rd Edition (2016). Habitats, buildings and trees were assessed for suitability for use by bats and categorised independently using table 4.1 page 35 within the Bat Conservation Trust Guidelines (Collins, 2016).

Preliminary Ecological Appraisal for Bats

Habitats on site were assessed for their suitability for bats to use them for roosting, commuting and foraging both on the site and surrounding area. Commuting and foraging habitat suitability was categorised **low** to **high**. Commuting and foraging habitat valued as **moderate** or above may need further survey effort if lost to the proposals.

Preliminary Roost Assessment Trees

All trees were inspected for Potential Roost Features (PRFs). Features searched for included: Natural or woodpecker holes, cracks/splits in major limbs, loose bark, hollows/cavities, dense epicormic growth, bird and bat boxes. Where such features were found they were investigated for scratches or staining, bat droppings and smoothing of surfaces around entry points. Trees assigned a suitability of **moderate** or above may require further inspection if they are to be lost to the development.

Table 4.1: Guidelines for assessing Potential Roost Features (PRFs), commuting and foraging habitat within a proposed development site. Guidelines taken from table 4.1 page 35 of the Bat Conservation Trust Bat Surveys for Professional Ecologists Good Practice Guidelines – 3rd Edition (2016).

Suitability	Roosting Habitats	Commuting and Foraging Habitats
Negligible	*Negligible habitat features on site likely to be used by roosting bats.*	*Negligible habitat features on site likely to be used by commuting or foraging bats.*
Low	*A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions [a] 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 or hibernation [b]).* *A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. [c]*	*Habitat that could be used by small numbers of commuting bats 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 or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[a] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are 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 commuting 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 or tree 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 [a] and surrounding habitat.*	*Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats 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.*

[a] For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

[b] 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 et al., 2015). 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 large buildings in highly urbanised environments.

[c] This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI,2015).

3.4 Badger Survey Methods

The site was searched for setts and badger field signs including foraging areas, latrines and tracks. Attention was paid to the presence of the following field signs:

- Setts: single holes or a series of holes likely to be interconnected underground;
- Latrines: badgers usually deposit faeces in excavated pits;
- Paths and footprints;
- Scratching posts: at the base of trees;
- Snuffle holes: areas where badgers have searched for insects;
- Day nest: bundles of vegetation where badgers may sleep above ground; and
- Traces of hair.

3.5 Great Crested Newt Habitat Suitability Index (HSI)

The ditch (D1) that lines the northern site boundary was assessed for suitability as great crested newt breeding habitat. The HSI assessment followed the method described by Oldham *et al*. (2000) as updated by ARG UK (2010), involving an assessment of each water body against ten suitability indices:

- Location of the pond within the context of Britain;
- Total surface area of the pond;
- Pond drying (based on both local knowledge and field evidence);
- Water quality;
- Percentage perimeter shaded;
- Presence or absence of waterfowl;
- Presence or absence of fish;
- Number of water bodies situated within 1km;
- Suitability of terrestrial habitat; and
- Percentage macrophyte cover.

The HSI is calculated using an equation producing a single number between 0 and 1. The value provides an indication of whether the water body is likely to support a population of great crested newts. The lower the Index the less likely the location is to support a breeding population. Ponds are classed as Poor, Below Average, Average, Good or Excellent habitat suitability based on this value.

3.6 Water vole and Otter

D1 was briefly was assessed for use by otters and water voles in August 2022, following methods outlined in *Chanin P (2003). Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough* and Strachan, R., Moorhouse, T., Gelling, M. (2011). *Water Vole Conservation Handbook*, 3rd Edition. Wildlife Conservation Research Unit: Abingdon.

On the 21st June 2023, D1 was assessed in full for use by otters. Signs of otter use including prints, spraints, couches or holts were searched for from the banks.

3.7 Evaluation

Habitats and species on the site were evaluated following the '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' 2018. A geographical frame of reference is assigned to each habitat and species, with International Value being most important, then National, Regional, County, District, Local and lastly, within the immediate Zone of Influence (ZoI) of the proposals only.

Value judgements are based on characteristics that can be used to identify ecological resources or features likely to be important in terms of biodiversity. These include site designations such as SSSIs. For undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological resource are considered. Ecological resource quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

The recommendations detailed within this report aim to meet requirements of the Environment Act and Biodiversity Metric 3.1 as far as possible at this stage.

3.8 Limitations

The site visit was undertaken in August which is within the optimal time of year for phase 1 habitat surveys, sufficient vegetation was present to enable habitat identification. It is not considered a limit to the conclusions of the report based on the habitats found within the site and the works proposed.

The absence of biological records does not necessarily mean the absence of species. This has been taken into account within the report conclusions.

The site was visited on only one occasion. This produces a snapshot of habitats and species on the site and others may be present at different times of the day or year. This limitation has been taken into account within this report.

4.0 Survey Results

4.1 Desk Study

Two County Wildlife Sites (CWS) were identified within 2km of the site;

- Fish Hatcheries (CWS) 900m east; and
- Oxenrigs Pond (CWS) 1.2km east.

The River Ehen, Special Area of Conservation (SAC) flows approximately 150m west of the site at its closest point and Florence Mine Site of Special Scientific Interest (SSSI) lies approximately 800m east of the site. Pockets of priority deciduous woodland also lie within 2 km of the proposed development site.

Following a review of records held by CBDC, several priority species that have the potential to occur within the vicinity of the proposed development have been identified. These include birds, otter, bats, red squirrel and amphibians. The species records are summarised below, and the detailed records held by CBDC within 2km of the site are displayed within Appendix 5.

No species records were returned by CBDC within the site boundary.

Birds

One thousand, nine hundred and fifty-seven records were returned for bird species within 2km of the site. Species present include buzzard, curlew, kestrel, swallow, house martin and house sparrow. All species recorded within 2km are displayed within Appendix 5. The closest record is for an undisclosed sensitive species approximately 330m east from the site. The most recent record is dated February 2013 for a Gossander approximately 2km north of the site.

Bats

Twenty records for bats were returned in the search area. Records include two bat species, two myotis bat species, two noctule, five pipistrelle bat species, seven common pipistrelle, three soprano pipistrelle and one brown long eared bat. The closest and most recent records are for myotis bat species, common pipistrelle and soprano pipistrelle approximately 390m northeast from the site.

Amphibians

Forty six records for amphibians were returned within the data search. Species present include common toad, common frog, palmate newt and great crested newt. The closest record is approximately 650m northeast of the site for great crested newt in 2011. The most recent record is for common toad in June 2016 approximately 1.3km southwest of the site.

Reptiles

Six records of reptiles were returned within the data search. Species present include slow worm, common lizard and adder. The most recent record is for common lizard approximately 2km east of the site. The closest record is for common lizard also, approximately 1.2km south-west of the site.

Terrestrial mammals

One hundred and ninety records for terrestrial mammals were returned within the search area, including forty-three for west European hedgehog. Further species present include Eurasian otter, Eurasian badger, stout weasel, Eurasian common shew, European rabbit, eastern grey squirrel and Eurasian red squirrel.

A list of key habitats is shown in table 5.1 below and a summary description of key habitats within the site is provided in Section 5.2. Notes on the presence or potential presence of protected species are provided in Section 5.3. The Phase 1 Habitat map can be found in Appendix 1. The Target Notes (TN) and lists of species recorded during survey are presented in Appendix 2.

4.2 Habitat Survey

The site lies within Egremont to the south west of Carlisle and is bound by Uldale View to the west, with residential dwellings to the north and agricultural land use to the south. The river Ehen flows approximately 150m from the western site boundary.

The site comprises agricultural fields (F1 & F2) that are planted with agricultural crops with F2 recently been harvested. The full site is bound by species poor hedgerows with tall ruderal vegetation present to the field margins. A ditch (D1) lines the northern boundary of F2 and scattered trees and tall ruderal vegetation is present within the bank areas. These habitats are presented on plan P.1723.22.01 (Appendix 1).

The habitat types identified within the site are detailed below and are displayed on drawing P.1723.22.01 *Phase One Habitat Survey* in Appendix 1 and on Photographs within Appendix 3. Species lists are displayed in Appendix 2.

Scattered trees (A3.1)

Scattered trees are present to the north of F2 and are predominantly sycamore species. This habitat is displayed in Photograph 5 within Appendix 3.

Agricultural crop (J1.1 – Arable crop)

F1 was planted with a young agricultural crop at the time of the visit in August 2022. Due to the age of the crop, there was also exposed, bare soil throughout the field. F2 had been recently harvested for agricultural crops with only stubble remaining on the ground.

In June 2023, F1 was in crop with potatoes and F2 comprised perennial ryegrass grassland. This habitat is displayed in photographs 1, 2, & 7 within Appendix 3.

Species Poor Hedge (J2.1.2)

Species poor hedgerows comprising hawthorn and occasional ash trees border the entire site. This habitat is displayed in photograph 4 within Appendix 3.

Tall Ruderal Vegetation (C3.1)

Tall ruderal vegetation is present throughout the margin of both fields, species present include willow herb, common nettle and horsetail. An abundance of willow herb is also present to the north of F2 in the areas adjacent to D1. This habitat is displayed in photograph 3 within Appendix 3.

Running water (G2)

A water course (D1) lines the northern boundary of F2 and flows from a culverted area to the north western corner of the site. The ditch flow east across the site and offsite to join the River Ehen (SAC). The water body was assessed for its great crested newt suitability and are discussed further in section 4.3 below.

4.3 Great Crested Newt Suitability

Great Crested Newt Habitat Suitability Index (GCN HSI)

Table 4.1: Standing Water Description and GCN HSI with full details in Appendix 6.

Standing water description	Photograph
Ditch (D1): lines the northern boundary of F2 and flows from a culverted area to the north western corner of the site. The ditch flows east across the site and offsite to join the River Eden (SAC). The watercourse is lined by scatted trees and tall ruderal vegetation. The water was flowing at a steady speed and was a depth of 5cm with small boulders noted in the bed of the water course and the banks were >45° comprising a mixture of soil and stone. D1 will be retained within the proposals The HSI score was 0.67 meaning it has **Average** suitability for use by great crested newt for breeding.	No photograph available

4.4 Protected and Notable Species

Birds

The habitats within the site provide suitable foraging and nesting opportunities for bird species. These habitats include water course, arable crop, tall ruderal, scattered trees and species poor hedge. During the survey, wood pigeon and carrion crows were identified within F1.

The site provided very limited habitat for buzzard, curlew, and kestrel due to disturbance from agricultural practices. The species do not require further consideration within this planning application and will not be discussed further within this report.

Bats

No buildings are present within the site. Trees within the site have the potential to support roosting bats however, a detailed preliminary bat roost assessment was not undertaken during the survey, it was noted that trees to the north of F2 possessed features, including cracked and broken limbs that may support roosting bats. The trees may require a further daytime inspection for bats once the extent of any tree loss is known.

The species poor hedgerow, scattered trees and agricultural crops within the site provide good suitability for commuting and foraging bats, with good connectivity to the surrounding land use.

Badger and other small mammals

The agricultural cropped fields provide limited foraging and shelter habitat for badger and other small mammal species such as hedgehog, stout, weasel, Eurasian common shew, European rabbit. No evidence of badger, hedgehog or other mammals were identified within the site during the survey.

Ditch D1 provides very limited habitat for otter and the water level was low in June 2023 (<4cm) with boulders present, the banks are also very steep and the vegetation has become very over grown, limiting access to the site. No signs of otter use including prints, spraints, couches or holts were searched for from the banks and no mammal paths were noted from the watercourse to F2 that may indicate the otter were using the terrestrial habitats within the site. The species do not require further consideration within this planning application and will not be discussed further within this report.

Amphibians

No ponds are present within the site. A ditch (D1) lines the northern site boundary and will be retained within the proposals. The River Ehen (SAC) lies 150m from the western site boundary and the onsite D1 fees into the river. The ditch was at a moderate level of flow at the time of the visit with steep banks which would limit access for amphibians to the proposed site. The site also offers very limited terrestrial habitat due to its agricultural use. The water flow is likely to also make the water body unsuitable aquatic habitat for amphibians.

Reptiles

The habitats within the site do not offer suitability to support reptiles. Ecotones are not present within the site and the habitats are scattered across the site with no suitable connectivity. The habitats within the site are prone to high human disturbance. Reptiles do not require further consideration within this planning application and will not be discussed further within this report.

Invasive species

No non-native invasive species were identified within the site during the walkover survey.

5.0 Evaluation and Recommendations

5.1 Designated Sites and Habitats

The River Ehen (SAC) lies approximately 150m from the western site boundary and the onsite D1 flows into the river. The watercourses may be impacted during the construction phase from onsite activity such as dust and debris. It is recommended that Construction Environmental Management Plan (CEMP) is implemented to ensure the areas are protected during the construction phase.

Florence Mine Site (SSSI) lies approximately 800m east of the proposed development site, due to reduced connectivity from the site to the designated area there will be limited impact on the area following the development. It is recommended that the SSSI is considered within the CEMP to ensure the area is protected during the construction phase.

To the north a section of the River Ehen, (Ennerdale Water to Keekle Confluence) is designated as an Site of Special Scientific Interest (SSSI), this section of the is approximately 2.7km north of the proposed development site. The section of the river designated for Freshwater Pearl Mussels (FWPM) and Atlantic salmon and also as a SSSI for FWPM. Ascerta report P.1723.22 Habitat Regulation Assessment (HRA) should be read in conjunction with this.

The habitats on site comprise tall ruderal vegetation, agricultural crops, a water course, improved grassland, scattered trees and species poor hedgerow. These habitats are considered to have an ecological value of **within the zone of influence** of the site or lower. The site contains no designated or priority habitats. Overall, the proposals are unlikely to adversely affect the ecological value of the area.

The production of the Defra Metric Biodiversity Net Gain Calculations is recommended to minimise impacts of biodiversity and provide net gains in biodiversity and the production of a Management Plan to ensure the long-term commitments to manage the planting, protection and enhancement of biodiversity in and around the new development site.

5.2 Protected and Notable Species

Birds

The tall ruderal vegetation, agricultural crops, water course, scattered trees and species poor hedgerow suitable habitat for nesting and foraging bird species. It is recommended that vegetation clearance should be undertaken outside of the nesting bird season (1st March to 31st August Inclusive) to avoid any impact on breeding birds. If vegetation clearance cannot be undertaken outside of the breeding bird season, a nesting bird check undertaken by a suitably experienced ecologist should be undertaken immediately prior to works commencing. If an active birds' nest is identified a suitable buffer zone should be implemented where no works are to occur within until the young have fledged the nest.

Bats

Bat records were returned within 2km of the site. The closest record was recorded 390m northeast of the site.

The habitats on site provide **low** suitability for commuting and foraging bats and no buildings are present within the site. The trees within the site may possess suitable features to support a bat roost therefore, it recommended if trees are to be removed to accommodate the proposals a preliminary bat roost assessment of those trees to be affected is undertaken to assess their potential to support a bat roost and to inform further recommendations if required.

Badger and other small mammals

The site provides limited habitat for badger, hedgehog and other mammals within the tall ruderal vegetation, agricultural crops, scattered trees and species poor hedgerows. These habitats are likely to be impacted by the proposals and therefore, it is recommended that a Badger, Hedgehog and mammal Reasonable Avoidance Measures (RAMS) Methods are implemented during the works to avoid harm to this species. The RAMS should include:

- Vegetation clearance applies to all habitats cleared in daytime air temperatures above 5°C. Works must be avoided in cold temperatures or if prior overnight temperatures have been less than 1°C;
- The cut material is to be chipped and placed in discrete piles outside the working areas or removed from the site;
- Existing tracks should be utilised for vehicle movements where possible;
- Throughout the works all trenches must be covered at night or ramps provided to prevent badger, mammals and hedgehog from getting stuck. Large pipes must also be covered to prevent badger access and risk of these species getting stuck; and
- Construction material will be stored on pallets to avoid creating habitat for hedgehog, mammals and badger.

To enable hedgehog continued use of the site it is advised that gaps of at least 13cm by 13cm are left under any new garden fences to enable hedgehog to roam freely within the area following development.

Red squirrel

Records for red squirrel were retuned within 2km of the site. The scattered trees provide limited habitat for red squirrel due to the fragmentation of the canopies. It is recommended that the site is enhanced for red squirrel with appropriate planting to provide a buffer zone and increase connectivity to the surrounding land use.

Suitable tree species for red squirrel include:

- Scots pine (*Pinus sylvestris*);
- Willow (*Salix* spp.);
- Rowan (*Sorbus aucuparia*);
- Birch (Betula pendula or B. pubescens);
- Hawthorn (Crataegus monogyna);
- Blackthorn (Prunus spinosa);
- Alder (Alnus glutinosa); and
- Holly (Ilex aquifolium).

Invasive species

No non-native invasive species were identified during the walkover surveys. As invasive species can colonise very quickly it is recommended that an updated check invasive species check is undertaken prior to the start of works.

Amphibians

A ditch (D1) lines the northern site boundary and will be retained within the proposals. The River Ehen lies 150m from the western site boundary and the onsite D1 feeds into the river. The waterbody was at a moderate level of flow at the time of the visit with steep banks which would limit access for amphibians to the proposed site. The water flow is likely to also make the water body unsuitable aquatic habitat for amphibians onsite. The terrestrial habitats do provide refuge areas and connectivity corridors for amphibians; however, this is limited due to the agricultural use of the site and it is prone to regular disturbance. These habitats are likely to be impacted by the proposals and therefore, it is recommended for the areas to be lost that an Amphibian Reasonable Avoidance Measures (RAMS) Methods should be implemented during the works to avoid harm to this species. The RAMS should include:

- Vegetation clearance applies to all habitats cleared in daytime air temperatures above 5°C. Works must be avoided in cold temperatures or if prior overnight temperatures have been less than 1°C;
- The cut material is to be chipped and placed in discrete piles outside the working areas or removed from the site;
- Existing tracks should be utilised for vehicle movements where possible;
- Throughout the works all trenches must be covered at night or ramps provided to prevent amphibians from getting stuck;
- Construction material will be stored on pallets to avoid creating habitat for amphibians.

5.3 Enhancements

In order to meet requirements for biodiversity protection and enhancement outlined within the NPPF, it is recommended that ecological enhancements are included. These could include:

1. Provision of eighteen bird boxes (25mm and 32mm entrance hole box, house sparrow terrace, swift box), attached to new buildings on site;
2. Provision of fifteen bat features (e.g. Vivara bat bricks or '*bird brick houses*' bat boxes) integrated within new buildings;
3. Suitable landscaping incorporating species that provide a food or shelter resource to wildlife to include hawthorn, hazel, holly, blackthorn, field maple, dog rose and honeysuckle as hedgerow species and oak, alder, field maple, silver birch, crab apple, rowan and bird cherry as tree species together with implementing a relaxed mowing regime and establishing wildflowers in these areas; and
4. Suitable landscaping to provide refuge, forage and connectivity for red squirrels, incorporating species to include scots pine, willow, rowan, birch, hawthorn, blackthorn, alder and holly.

6.0 Conclusions

The site was subject to an extended phase one habitat survey. During the survey and following review of historical species records, it is considered that an impact on birds, otter, bats, red squirrel, amphibians, badger, hedgehog and other small mammals are likely to occur in relation to the proposals for the site. The following recommendations have been made to avoid an impact on these species:

- If works have not begun by August 2024, an updated site visit will be required to assess the habitats within the site;
- Preliminary bat roost assessment of trees that will be lost to the proposals to determine the suitability of any features that may be present to support a bat roost and to inform further recommendations if required;
- Production and Implementation of a Construction Environmental Management Plan (CEMP) to ensure the River Ehen, ditch D1 and Florence Mine Site (SSSI) are protected during the construction phase;
- Implementation of a hedgehog, badger and mammal RAMS to avoid any harm to this species during the proposed works;
- Implementation of an amphibian RAMS to avoid any harm to this species during the proposed works;
- Precautionary check for invasive prior to works commencing;
- Enhancing the site for species through appropriate landscape planting that includes native, species rich hedgerows, trees and areas of wildflowers plus provision of integrated bat and bird features within newly constructed buildings;
- Provision of species within the landscaping plans to provide forage and refuge for red squirrel;
- SUDS features to include native planting to enhance the ecology and biodiversity of the proposed site
- Production of the Defra Metric Biodiversity Net Gain Calculations to minimise impacts on biodiversity and provide net gains in biodiversity;
- Production of a Management Plan to ensure the long-term commitments to manage the planting, protection and enhancement of biodiversity in and around a new development site; and
- Vegetation clearance or pruning should be undertaken outside of the nesting bird season (1st March to 31st August Inclusive) to avoid any impact on breeding birds. Or a nesting bird check undertaken by a suitably experienced ecologist should be undertaken immediately prior to works commencing.

It is considered that there would be very limited impacts on the local ecology as a result of the proposals, provided the recommendations detailed within section 5.0 above are followed.

7.0 References

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Appendix 1

KEY

- Survey area
- A — Agricultural crop - F1 (J1.1)
- A — Agricultual crop - F2 (J1.1)
- Ditch D1 (G2)
- Species poor hedgerow (J2.1.2)
- \+ Tall ruderal vegetation (C3.1)
- Scattered trees (A3.1)

DO NOT SCALE.
ALL COORDINATES RELATED TO LOCAL GRID.
LOCATED TO NG BY BEST FIT TO DETAI.
EXTRACTED FROM OS DIGITAL DATA.

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www.landscapetreesecology.com

CLIENT: Gleeson Homes

PROJECT: Uldale View

DRAWING TITLE: Phase One Habitat Survey

SCALE:	DRAWN BY:	DRAWING No:
NTS@A3	LK	P1723.22.01
DATE:	CHKD BY:	REV:
01/09/2022	LA	-

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Appendix 2

Species Lists and Target Notes

Table 1: Flora Species

English Name	Scientific Name
Ash	*Fraxinus excelsior*
Beech	*Fagus sylvatica*
Cleavers	*Galium aparine*
Clover	*Trifolium repens*
Hawthorn	*Crataegus sp.*
Field horsetail	*Equisetum arvense*
Greater willowherb	*Epilobium hirsutum*
Herb robert	*Geranium robertianum*
Oak	*Quercus robur*
Perennial rye grass	*Lolium perenne*
Potato	*Solanum tuberosum*

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Appendix 3

Photographs

Table 2: Photographs of the site

Photograph 1: Field F1, August 2022

Photograph 2: Field F2 August 2022

Photograph 3: Tall ruderal species adjacent to D1

Photograph 4: Species poor hedgerow

Photograph 5: Scattered trees to the north of F2

Photograph 6: Field F1, June 2023

Photograph 7: Field F2, June 2023

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Appendix 4

Relevant Legislation

European Legislation

The following Directives have been adopted by the European Union and provide protection for fauna and flora species of European importance and the habitats which support them:

- Directive 2009/147/EC on the Conservation of Wild Birds (Birds Directive);
- Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive).

UK Legislation

The Habitats Directive has been transposed into national legislation through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (The Habitats Regulations). This provides for the designation and protection of 'European Sites' (SPAs, SACs and Ramsar Sites, including proposed or potential European Sites) and the protection of 'European Protected Species'.

The key UK legislation relating to nature conservation is the Wildlife and Countryside Act 1981 (as amended) (W&C Act). This Act is supplemented, *inter alia*, by provision in the Countryside and Rights of Way (CRoW) Act 2000, and the Natural Environment and Rural Communities Act 2006 (NERC Act). Additional species and habitat specific UK legislation includes the Protection of Badgers Act 1992 and the Hedgerow Regulations 1997.

The Environment Act sets out how the UK will maintain environmental standards following leaving of the EU. The Bill builds on the vision of the 25 Year Environment Plan, with the ambition from the government to leave the environment in a better state than it was when inherited.

The Defra Biodiversity Metric is being implemented to work alongside the Environment Act. This tool calculates potential biodiversity impacts as a result of development and identifies mitigation and compensation requirements to ensure no net loss of biodiversity. In addition, it identifies measures that can be implemented in order to meet Biodiversity gain as a result of development. Defra released a beta version of the biodiversity metric in July 2019, with the most recent revision in April 2022. This metric is likely to be the default metric used by councils, with the most recent version to be submitted to support a planning application.

The National Planning Policy Framework (NPPF) 2021 has been published to provide further planning guidance. Wildlife, biodiversity and ecological networks are referred to in Section 15 '*Conserving and enhancing the natural environment*'. The NPPF states that the planning system should contribute to and enhance the natural and local environment by: recognising the wider benefits of ecosystem services, minimising impacts on biodiversity and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Further guidance is provided within Government Circular *06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System*.

Species and Habitats of Principal Importance

Species and Habitats of Principal Importance are listed under section 41 of the NERC Act and are a material consideration in planning decisions. Planners require relevant, up to date information from ecological surveys in order to assess the effects of a proposed development on biodiversity as Councils have a statutory obligation under section 40 of the NERC Act to consider biodiversity conservation in the determination of planning applications.

Background information about the lists of priority habitats and species (Species and Habitats of Principal Importance) can be found within the UK Biodiversity Action Plan (UK BAP). Although this has been succeeded by the '*UK Post-2010 Biodiversity Framework*', many of UK BAP tools are still relevant. BAPs identify habitats and species of nature conservation priority on a UK (UK BAP) and Local (LBAP) scale. Most BAP priority habitats and species have Habitat Action Plans (HAP) and Species Action Plans (SAP) and there are also "grouped action plans" for groups of related species with similar conservation requirements. The LBAP relating to this Site is the Cumbria Biodiversity Action Plan.

Badgers

The legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992.

Under the Protection of Badgers Act 1992 it is an offence *inter alia* to:

- Wilfully kill, injure or take a badger, or to attempt to do so;
- Cruelly ill-treat a badger; or
- Intentionally or recklessly interfere with a badger sett by (a) damaging a sett or any part of one; (b) destroying a sett; (c) obstructing access to or any entrance of a sett; (d) causing a dog to enter a sett; or (e) disturbing a badger when it is occupying a sett.

The Badger Act 1992 defines a badger's sett as "*any structure or place which displays signs indicating current use by a badger*"

Natural England can issue licences to enable works to continue that may affect a protected species. In relation to disturbance of badgers, Natural England (2009) gives guidelines on disturbance which will require a licence. These includes: "*using very heavy machinery (generally tracked vehicles) within 30 metres of any entrance to an active sett; using lighter machinery (generally wheeled vehicles), particularly for any digging operation, within 20 metres; light work such as hand digging or scrub clearance within 10 metres. There are some activities which may cause disturbance at greater distances (such as using explosives or pile driving) and these should be given individual consideration.*"

Bats

In England, all bats and their roosts are protected under the Conservation of Habitats and Species Regulations 2017 and the Wildlife & Countryside Act 1981 (as amended). Several species of bat are also highlighted as Priority Species under the UK Biodiversity Action Plan and within the Local BAP.

Under the current legislation as summarised on pages 8 and 9 of the Bat Surveys for Professional Ecologists Good Practice Guidelines – 3rd Edition (2016) it is a criminal offence to:

"To kill, capture, injure or take a wild bat;

- *To damage or destroy a place used by a bat for breeding or resting. All offences of this nature are identified within the Habitats Regulations. This offence is unique in that it can be committed accidently. No element of intentional, reckless or deliberate action needs to be evidenced;*
- *To disturb bats anywhere (roosts, flight lines or foraging areas) if levels of disturbance can be shown to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate or to affect significantly local distribution or abundance;*
- *To intentionally or recklessly disturb a bat, whilst it is occupying a place of shelter or protection;*

- *To intentionally or recklessly obstruct access to any place used by a bat for shelter or protection; and*
- *To be in possession or control of a bat alive or dead (or any part of a bat or anything derived from a bat, although bat droppings are generally considered to be acceptable), or to transport a bat, to sell or exchange a bat or to offer to sell or exchange a bat taken from the wild."*

Breeding Birds

Breeding Birds are protected under the Wildlife and Countryside Act which make it an offence to:

- *intentionally kill, injure or take any wild bird or take, damage or destroy the nest of any wild bird whilst it is in use or being built;*
- *intentionally take or destroy the egg of any wild bird;*
- *have in one's possession or control any wild bird, dead or alive, or any part of a wild bird (including eggs), which has been taken in contravention of the Act or the Protection of Birds Act 1954;*
- *intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.*

Great Crested Newt

The great crested newt (*Triturus cristatus*) is fully protected under the Wildlife and Countryside Act, 1981 (as amended) and the Habitats Regulations, 2017. It is also a Species of Principal Importance. The legislation makes it an offence to:

- *Deliberately (or intentionally) kill, injure or capture (or take) a great crested newt, or great crested newt egg or eft;*
- *Deliberately (intentionally) damage or destroy any breeding site or resting place (i.e. pond, refuge, hibernaculum);*
- *Deliberately or recklessly obstruct access to any breeding site or resting place;*
- *Deliberately, intentionally or recklessly disturb a great crested newt, in particular disturbance which is likely to:*
    - *impair the ability of the great crested newt to survive, breed, reproduce, or to rear or nurture young;*
    - *impair the ability of the great crested newt to hibernate or migrate; or significantly affect the local distribution or abundance of great crested newts*

Invasive Species

It is an offence under Section 14(2) of the Wildlife and Countryside Act 1981 to '*plant or otherwise cause to grow*' in the wild any plant in Schedule 9 Part II.

Other Aquatic Species

Water vole (*Arvicola amphibious*) are a Species of Principal Importance and also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to:

- *intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;*
- *intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose;*
- *intentionally kill, injure or take water voles;*
- *possess or control live or dead water voles or derivatives;*
- *sell water voles or offer or expose for sale or transport for sale; and*
- *publish or cause to be published any advertisement which conveys the buying or selling of water voles*.

Otter (*Lutra Lutra*) are similarly protected under the Wildlife and Countryside Act, 1981 (as amended) and have additional protection as a European Species under The Habitats Regulations 2017.

It is a criminal offence to intentionally, wilfully kill, injure or take any of the aforementioned protected species or to destroy or disturb its habitat.

Local Policy

The site lies within the Copeland District of Cumbria and is covered by the Copeland Development Plan with the Core Strategy and Development Management Strategies (adopted December 2013).

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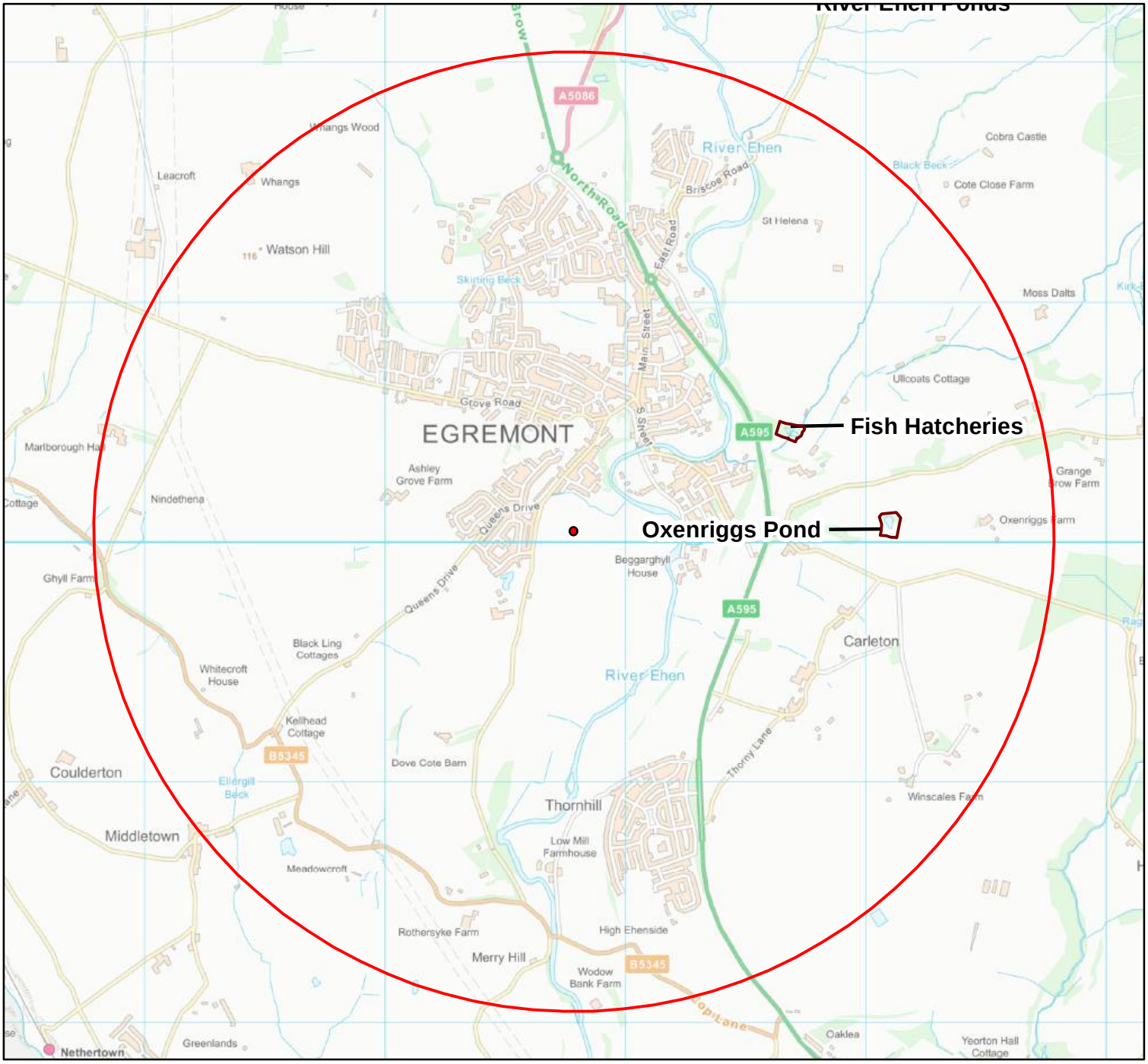
Appendix 5

Cumbria Biodiversity Data Centre (CBDC): Non-Statutory Sites Search

For: Liz Kenyon at Ascerta

Site Name: Uldale View, Egremont, CA22 2LE
Centroid: NY 0078 1004
Buffer: 2km
Search Date: 29/07/2022

N.B. Sites are displayed only if they exist within the search area



Key

County Wildlife Sites

0 250 500 1,000 m

Any queries in the first instance contact:
Dr Moustafa Eweda
Biological Data Officer
Cumbria Biodiversity Data Centre (CBDC)

T. 01228 618770
E. dataofficer@cbdc.org.uk

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Appendix 6

Great Crested Newt Habitat Suitability Index (GCB HSI)

D1

	SI_2		SI_3		SI_4		SI_5		SI_6		SI_7		SI_8		SI_9		SI_{10}		Product	HSI	Suitability
	Pond Area		Pond Drying		Water Quality		Shade		Fowl		Fish		Ponds		Terrestrial Habitat		Macrophytes				
1	200m2	0.4	Never Dries	0.9	Moderate	0.67	71-75%	0.7	Absent	1	Absent	1	1	0.45	Moderate	0.67	1-5%	0.35	0.01782	0.6685	**Average**