Preliminary Ecological Appraisal

Growing Well Site, Beck Green Nursery, Egremont, Cumbria, CA22 2AS

2023

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Nothing in this report constitutes legal advice or opinion. If legal opinion is required a qualified legal professional should be contacted for advice.

Contents

1. Introduction

1.1. Background and Pre-Existing Site Information

This report details a Preliminary Ecological Appraisal conducted at the Growing Well Site, Beck Green Nursery, Egremont, Cumbria, CA22 2AS (Nat. Grid Ref. NY 01350 10514 - Approx. centre of site).

Indicative plans 'as existing' and 'as proposed' have been provided (See Table 1 and Figure 2) and it is thereby understood that a proposal exists to develop the former Copeland County Council plant nursery into a 'Growing Well' facility. 'Growing Well' is a therapeutic community mental health service which seeks to assist recovery from mental health challenges through supported activity in the outdoors, within a real-world horticulture enterprise, supported and guided by experienced therapeutic growers and mental health support staff.

This survey has been commissioned to ascertain a baseline preliminary ecological assessment of the site and specifically to identify;

- Any areas of potential conservation interest,
- Any potential impacts to legally protected species / species groups,
- Any likely impacts on statutory and non-statutory designated sites as a result of the proposal,
- The presence of any invasive species listed in Schedule 9 of The Wildlife and Countryside Act 1981 (as amended).

Ben Quitman - Solomons Europe - commissioned Hesketh Ecology to complete this survey and report in November 2023. It is understood that this report will be used to accompany a full planning application for the proposed works.

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1 (below).

Document Name / Drawing Number	Author
Site / Proposed Works Plan. Google My Maps. https://www.google.com/maps/d/edit?mid=1CxMvO1i3wp-p7w8sOhkL9P-LaxSbUz7w&usp=sharing	Ben Quitman - Solomons Europe

Table 1: *Documentation provided by client.* ***BOLD*** *text indicates plans reproduced below (Figure 2).*

1.2. Full Details of Proposed Works on Site

See Figure 2 (below).

Beck Green Nursery is a former Copeland County Council plant nursery facility. The Site currently contains a number of greenhouses, potting sheds / offices and areas of hardstanding and is understood to have been in use as a plant nursery until c.2013 (pers. comms. Ben Quitman). Although in need of some repair and refurbishment, the nursery infrastructure on site - greenhouses, buildings, services etc. - is broadly intact.

The proposed works are designed to create outdoor, in-ground growing space on the Site. Having been disused for an extended period, much of the Site has become overgrown and it is therefore necessary to cut back dense vegetation and dig-over the site in preparation for planting. Furthermore, areas of existing hardstanding will be scraped off to facilitate the siting of a modular building and piles of loose materials which have been bunded around a former car parking area will be re-profiled to form a low earth bund along the eastern side of the Site.

It is also understood that a dilapidated modular building in the south west corner of the Site will be removed.

The proposed works are all very minor in nature and will primarily be conducted by hand. An excavator will be required to re-profile the soil bunds, but cutting back and digging over will be conducted using hand tools. Once the outdoor growing areas have been prepared, organic horticultural practices will be employed, with no synthetic fertilisers, pesticides or herbicides being used.

It is understood that in pre- application discussions with Cumberland County Council planning department, it was requested that an ecological survey of the Site be conducted and submitted with the planning application.

Figure 1: *Former Beck Green Nursery site A) Location Plan and B) Site boundary.*

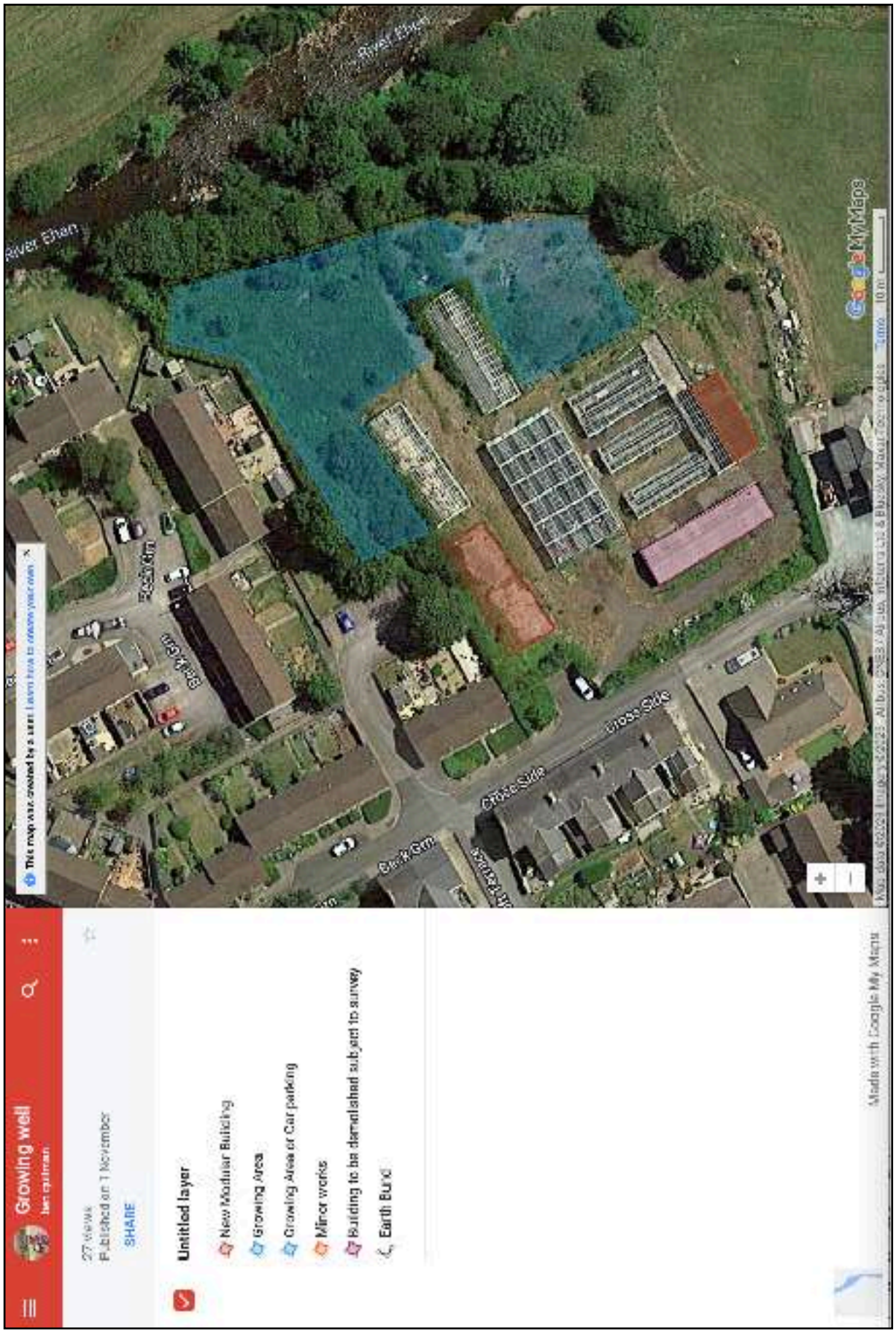


Figure 2: *Site / Proposed Works Plan. Google My Maps. https://www.google.com/maps/d/edit?mid=1CxMvO1i3wpp7w8sOhkL9P-LaxSbUz7w&usp=sharing , produced by Ben Quitman, Solomons Europe.*

2. Legislation and Policy

2.1. Designated Sites

There are broadly 3 levels of designation currently in place to protect the most significant areas for habitats and wildlife. These are Internationally Designated Sites (Special Areas of Conservation, Special Protection Areas etc.), Domestically Designated Sites (Sites of Special Scientific Interest, National Nature Reserves etc.) and Locally Designated Sites (County Wildlife Sites, Local Nature Reserves etc.).

The Conservation of Habitats and Species Regulations 2017 provides safeguards for European Protected Sites and Species (as listed in the Habitats Directive). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

2.2. Internationally Designated Sites

Special Areas of Conservation (SACs) are areas which have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats. All SAC's are also designated as SSSI's. The legal requirements relating to the designation and management of SACs in England are set out in The Conservation of Habitats and Species Regulations 2017. The SAC designation is recognition that some or all of the wildlife and habitats are particularly valued in a European context.

Special Protection Areas (SPAs) are areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the 'Birds Directive 1979' which provides enhanced protection given by the Site of Special Scientific Interest (SSSI) status all SPAs also hold. The legal requirements relating to the management and protection of SPAs in England are set out in The Conservation of Habitats and Species Regulations 2017.

Natura 2000 is the centrepiece of EU nature & biodiversity policy. It is an EU wide network of nature protection areas established under the 1992 Habitats Directive. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) which they designate under the 1979 Birds Directive. Natura 2000 is not a system of strict nature reserves where all human activities are excluded. Whereas the network does include nature reserves most of the land is privately owned and the emphasis is on ensuring that future management is sustainable, both ecologically and economically.

The 'competent authority' is required to complete an Appropriate Assessment of a proposal, if the proposed activities would be likely to have a significant effect on the Natura 2000 site. An Appropriate Assessment aims to determine if the proposed development would have an adverse effect on the notified interest features of the SAC. The developer or proposers of the plan or project shall provide such information as the competent authority may reasonably require for the purposes of the assessment (Regulation. 43(2)).

2.3. Domestically Designated Site

Sites of Special Scientific Interest (SSSIs) are the country's very best wildlife and geological sites and give legal protection to these sites in England. Natural England now has responsibility for identifying and protecting SSSIs in England under the Wildlife and Countryside Act 1981 (as amended). The SSSI notification package includes a list of operations requiring Natural England's consent (formerly known as operations likely to damage the special interest). None of the listed operations can be carried out without Natural England's consent, or the consent of another public body (provided that the other body has formally consulted us). Operations listed on the list of operations requiring Natural England's consent (which are not already consented to) requires permission from Natural England. To obtain consent, a written notice must be submitted to Natural England containing the details of the operations in order for the proposal to be assessed and permission granted.

National Nature Reserves (NNRs) are all also designated as SSSIs. It is via this designation that legal protection is afforded to NNRs.

2.4. Locally Designated Sites

There are currently a number of different terms in use to describe Local Wildlife Sites, including Sites of Importance for Nature Conservation (SINCs), Sites of Nature Conservation Importance (SNCIs) and County Wildlife Sites. Local Wildlife Sites are usually selected within a local authority area and this process is often managed by the local Wildlife Trust together with representatives of the local authority and other local wildlife conservation groups. They support both locally and nationally threatened wildlife, and many sites will contain habitats and species that are priorities under the county or UK Biodiversity Action Plans (BAP).

In Cumbria, Local Wildlife Sites are known as 'County Wildlife Sites'. They are designated and reviewed at a county level by the Wildlife Selection Panel for the Cumbria Local Sites Partnership, administered by Cumbria Wildlife Trust. County Wildlife Sites are not afforded any legal protection.

2.5. Protected Species

The legislation protecting wildlife exists regardless of the requirements of any planning consent.

The legal protection of animals and plants in the United Kingdom is mainly provided for by:

- The Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000,
- The Habitats and Species Directive (92/43/EC) enacted through The Conservation of Habitats and Species Regulations 2017.
- The Protection of Badgers Act 1992.

The level of protection for each species varies according to the conservation status of the species.

The Conservation of Habitats and Species Regulations 2017 provides safeguards for European Protected Sites and Species (as listed in the Habitats Directive). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

The Countryside and Rights of Way Act 2000 supplemented existing legislation for wildlife protection by prohibiting reckless acts that result in the killing or injuring of protected species.

The Natural Environment and Rural Communities Act 2006 requires that every public authority in exercising its functions must have regard as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Section 41 of this Act requires the Secretary of State to have prepared lists of species and habitats which are considered to be of principal importance for the purpose of conserving biodiversity [The UK Biological Action Plan (BAP) species].

2.6. Schedule 2 - European Protected Species of Animal

Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 2 Animals
Horseshoe bats *Rhinolophidae* - all species
Common bats *Vespertilionidae* - all species
Wild cat (*Felis silvestris)*
Dolphins, porpoises and whales *Cetacea* – all sp.
Dormouse (*Muscardinus avellanarius)*
Pool frog (*Rana lessonae)*
Sand lizard (*Lacerta agilis)*
Fisher's estuarine moth (*Gortyna borelii lunata)*
Great crested newt (*Triturus cristatus)*
Otter (*Lutra lutra)*
Lesser whirlpool ram's-horn snail (*Anisus vorticulus)*
Smooth snake (*Coronella austriaca)*
Sturgeon (*Acipenser sturio)*
Natterjack toad (*Epidalea calamita)*
Marine turtles (*Caretta caretta, Chelonia mydas, Lepidochelys kempii, Eretmochelys imbricata* and *Dermochelys coriacea)*

Table 2: *Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 2 Animals*

These species are listed in Schedule 2 of the Habitat Regulations and in Schedule 5 of the Wildlife & Countryside Act 1981. The legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture (or take);
- Deliberately disturb;

- Recklessly disturb or obstruct access to any place used for rest and shelter
- Damage or destroy any place used for rest and shelter
- Possess or transport an animal or any part of, unless acquired legally,
- Sell (or offer for sale) or exchange

Work that disturbs Schedule 2 species is illegal without a Wildlife Development Licence issued by Natural England.

2.7. Schedule 5 - European Protected Species of Plants

Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 5 – Plants
Shore dock (*Rumex rupestris)*
Killarney fern (*Trichomanes speciosum)*
Early gentian (*Gentianella anglica*)
Lady's-slipper (*Cypripedium calceolus*)
Creeping marshwort (*Apium repens)*
Slender naiad (*Najas flexilis)*
Fen orchid (*Liparis loeselii*)
Floating-leaved water plantain (*Luronium natans)*
Yellow marsh saxifrage (*Saxifraga hirculus*)

Table 3: *Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 5 - Plants*

These species are listed in Schedule 5 of the Habitat Regulations and in Schedule 8 of the Wildlife & Countryside Act 1981. The legislation makes it illegal to pick, uproot, destroy, or trade in these plants.

2.8. Otters

Otters are protected under Section 39 of The Conservation of Habitats and Species Regulations 2017 as European Protected Species and Section 9 of the Wildlife and Countryside Act 1981 (as amended) (Schedule 5). It is an offence to:

- Deliberately capture, injure or kill an Otter;
- Intentionally or recklessly disturb an Otter in a place used for shelter or protection, or deliberately disturb Otters in such a way as to be likely significantly to affect (i) the ability of any significant group of Otters to survive, breed, rear or nurture their young, or (ii) the local distribution or abundance.

- Damage or destroy a breeding or resting place
- Intentionally or recklessly obstruct access to a place used for shelter or protection
- Possess an Otter (alive or dead), or any part of an Otter.

Work that disturbs otters is illegal without a Wildlife Development Licence issued by Natural England.

2.9. Badgers

Badgers are a protected species. In addition to The Wildlife and Countryside Act 1981, The Countryside and Rights of Way (CRoW) Act 2000 and The Conservation of Habitats and Species Regulations 2017, badgers and their setts are also covered by the provisions of the Protection of Badgers Act (1992). A sett is defined as "any structure or place which displays signs indicating current use by a badger". The legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture (or take) badgers;
- Damage a badger sett or any part of it;
- Destroy a badger sett;
- Obstruct access to, or any entrance of, a badger sett;
- Disturb a badger when it is occupying a badger sett;

Work that disturbs badgers is illegal without a Wildlife Development Licence issued by Natural England.

2.10. Breeding Birds

All wild birds (birds in a wild state resident in or visiting Great Britain) and their nests and eggs are protected under the Wildlife & Countryside Act 1981. Particular emphasis is given to the protection of breeding birds. With certain exceptions, it is an offence to:

- Kill, injure or take wild birds
- Take, damage or destroy the nest of wild birds while in use or being built
- Take or destroy the eggs of wild birds
- Disturb wild birds listed in Schedule 1 when nest building or at a nest containing eggs or young, or disturb dependent young of wild birds

2.11. Reptiles

Reptiles, including common lizards, slow worms and grass snakes, are protected under the Wildlife & Countryside Act 1981 against deliberate killing, injuring and sale (Sub-Sections 9 (1) and 9 (5)). These species are listed in Schedule 5.

2.12. Other Mammals

Mammal species not covered by the above legislation (rabbits, foxes, hares, moles etc) are protected by the Wild Mammals (Protection) Act 1996. This states; ‘any person [whom] mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering he shall be guilty of an offence.’ This is potentially relevant in the case of burrowing animals on a development site.

2.13. Invasive Non-Native Species

In the UK, 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 listed in Schedule 9, Part II to the Act. This could include cutting the plant or roots and disturbing surrounding soil if not correctly managed.

An offence under the Wildlife and Countryside Act can result in a criminal prosecution. An infringement under the Environmental Protection Act can result in enforcement action being taken by the Environment Agency (EA) which can result in an unlimited fine.

Schedule 9 – List of Invasive plant species	
Australian swamp stonecrop or New Zealand pygmyweed (*Crassula helmsii)*	Small-leaved cotoneaster (*Cotoneaster microphyllus*)
Californian red seaweed (*Pikea californica*)	Three-cornered garlic (*Allium triquetrum*)
Curly waterweed (*Lagarosiphon major*)	Variegated yellow archangel (*Lamiastrum galeobdolon subsp. argentatum*)
Duck potato (*Sagittaria latifolia*)	Virginia creeper (*Parthenocissus quinquefolia*)
Entire-leaved cotoneaster (*Cotoneaster integrifolius*)	Wakame (*Undaria pinnatifida*)
False Virginia creeper (*Parthenocissus inserta*)	Giant salvinia (*Salvinia molesta*)
Fanwort or Carolina water-shield (*Cabomba caroliniana*)	Green seafingers (*Codium fragile*)
Few-flowered garlic (*Allium paradoxum*)	Himalayan cotoneaster (*Cotoneaster simonsii*)
Floating pennywort (*Hydrocotyle ranunculoides*)	Hollyberry cotoneaster (*Cotoneaster bullatus*)
Floating water primrose (*Ludwigia peploides*)	Hooked asparagus seaweed (*Asparagopsis armata*)
Giant hogweed (*Heracleum mantegazzianum*)	Hottentot fig (*Carpobrotus edulis*)
Giant kelp (Macrocystis spp.)	Hybrid knotweed (*Fallopia japonica × Fallopia sachalinensis*)
Giant knotweed (*Fallopia sachalinensis*)	Indian (Himalayan) balsam (*Impatiens glandulifera*)
Giant rhubarb (*Gunnera tinctoria*)	Japanese knotweed (*Fallopia japonica*)
Japanese rose (*Rosa rugosa*)	Wall cotoneaster (*Cotoneaster horizontalis*)
Japanese seaweed (*Sargassum muticum*)	Water fern (*Azolla filiculoides*)
Laver seaweeds (except native species) (Porphyra spp)	Water hyacinth (*Eichhornia crassipes*)
Parrot's-feather (*Myriophyllum aquaticum*)	Water lettuce (*Pistia stratiotes*)
Perfoliate alexanders (*Smyrnium perfoliatum*)	Water primrose (*Ludwigia grandiflora*)
Pontic rhododendron (*Rhododendron ponticum*)	Water primrose (*Ludwigia uruguayensis*)

Schedule 9 – List of Invasive plant species	
Red algae (*Grateloupia luxurians*)	Waterweeds (Elodea spp.)
Rhododendron (*Rhododendron ponticum x Rhododendron maximum*)	Yellow azalea (*Rhododendron luteum*)
Purple dewplant (*Disphyma crassifolium*)	

Table 4: *Schedule 9 – List of Invasive plant species*

2.14. Natural Environment and Rural Communities (NERC) Act (2006)

Beyond the legal protection afforded to species in the UK, the Natural Environment and Rural Communities (NERC) Act (2006) states;

> *'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.'*
> NERC Act 2006 - Section 40.
>
> '*The Secretary of State must, as respects England, publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity.'*
>
> *'Without prejudice to section 40(1) and (2), the Secretary of State must—*
>
> > *(a) take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or*
> > *(b) promote the taking by others of such steps.'*
>
> NERC Act 2006 - Section 41

2.15. UK Biodiversity Action Plan (BAP) priority species / UK Post-2010 Biodiversity Framework

UK Biodiversity Action Plan (BAP) priority species were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The original list of UK BAP priority species was created between 1995 and 1999. In 2007, however, a revised list was produced, following a 2-year review of UK BAP processes and priorities, which included a review of the priority species and habitats lists.

The UK BAP has now been superseded by the UK Post-2010 Biodiversity Framework. The UK Post-2010 Biodiversity Framework covers the period from 2011 to 2020, and was developed in response to two main drivers: the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020 and its five strategic goals and 20 'Aichi Biodiversity Targets', published in October 2010; and the EU Biodiversity Strategy (EUBS), released in May 2011. The UK Post-2010 Biodiversity Framework now serves to meet the

statutory obligation imposed by Section 41 of the NERC Act. The UK BAP list, as revised in 2007, was incorporated into the UK Post-2010 Biodiversity Framework with only minor alterations.

The Cumbria Biodiversity Action Plan (CBAP) was designed to implement national biodiversity targets set out in the UK BAP at a local level, with an emphasis on local priorities. At its inception the CBAP included 40 species / species groups, 21 of which had dedicated action plans with a further 19 without action plans. The original CBAP list was updated in 2010 to include all UK BAP species which occur in Cumbria.

2.16. National Planning Policy Framework (NPPF) 2019

The National Planning Policy Framework (NPPF) was originally published by the Department of Communities and Local Government in 2012, consolidating over two dozen previously issued documents called Planning Policy Statements (PPS) and Planning Policy Guidance Notes (PPG) for use in England. A revised NPPF was published by the UK Government's Ministry of Housing, Communities and Local Government in 2018 and then again in 2019. The revised National Planning Policy Framework sets out the government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in 2012, and revised in 2018.

Chapter 15 of the NPPF, Conserving and Enhancing the Natural Environment, states (NB the following is a summary only, selecting points which relate to biodiversity and species only, for the full text see National Planning Policy Framework; February 2019, Ministry of Housing, Communities and Local Government ;

> *'Planning policies and decisions should contribute to and enhance the natural and local environment by:*
>
> - *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
>
> - *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;'*
>
> Paragraph 170, Pg. 49.
>
> *To protect and enhance biodiversity and geodiversity, plans should:*
>
> - *Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
>
> - *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

Paragraph 174, Pg. 50.

When determining planning applications, local planning authorities should apply the following principles:

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;*

Paragraph 175, Pg. 50.

3. Methodology

3.1. Desk Based Investigation

Natural England's MAGIC website (http://www.magic.gov.uk) was consulted for information relating to statutory designated sites adjacent to the Site or within the immediate area, for Granted European Protected Species Mitigation Licenses (EPSML) within 2km of the Site boundary, and for Great Crested Newt Class Survey Licence Returns and Great Crested Newt Pond Surveys 2017 - 2019 within 2km of the Site boundary.

A data search was commissioned from Cumbria Biodiversity Data Centre for all records of rare, scare, protected or invasive non-native species and non-statutory designated sites within a 2km radius of national grid ref. NY 01350 10514 (the approximate centre of the site).

A search of historic planning applications for the post-code area was attempted using the Copland Borough Council planning application search facility (https://www.copeland.gov.uk/planning/application-search) on 29/11/2023. However, the Copland Borough Council planning application search facility will only allow searches of historic planning applications at Parish resolution within the last 3 years. It was therefore not possible to identify any previous planning applications for the Site itself, nor the post-code area.

3.2. Field Survey

A daytime inspection of the site was conducted during which all areas of the site were inspected in detail during a walk over survey. A methodology based on that outlined in the The UK Habitat Classification System V4 Guidelines was employed, as per the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013), and the species / habitat codes presented therein used. Areas immediately adjacent the site were inspected from public rights of way only. Mature trees were inspected from ground level only using binoculars and an AG80 20x-60x spotting scope as necessary. The following evidence of potential for protected species is a brief summary only.

Bats

Evidence of potential for bats includes:

- Evidence of bats (droppings, seeing bats, smelling bats)
- Older trees/woodlands for foraging and roosting;
    - Woodpecker holes
    - Gap / crevices behind bark
    - Rot holes
    - Bird / bat boxes
    - Cracks associated with damaged limbs
- Linear landscape elements e.g. hedgerows and watercourses for commuting and foraging
- Built structures e.g. buildings and bridges for summer roosting or hibernation

In relation to bats, the survey methodology conformed with that laid out in '*Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London*'. Any buildings, woodland areas and standard trees within the site were categorised (negligible, low, medium or high) for their potential to support roosting bats.

The survey area for bats comprised all land within the site boundary.

Amphibians

Evidence of potential for protected amphibian species includes:

- Evidence of protected amphibian species (seeing great crested newts or natterjack toads)
- Ponds or other bodies of open standing water on site or within 500m of site
- Suitable terrestrial habitat including foraging habitat and / or hibernation potential

In relation to great crested newts, the survey methodology conformed with that laid out in '*English Nature (2001) Great crested newt mitigation guidelines Version: August 2001. English Nature. ISBN 1 85716 568 3*'. All ponds onsite or within 500m of the site boundary were identified using OS maps and a Habitat Suitability Index Score was calculated using '*Oldham R.S., Keeble J., Swan M.J.S., and Jeffcote M. (2000) Evaluating the suitability of habitat for the great crested newt. Herpetological Journal 10: 143-155*'.

The survey area for amphibians comprised accessible land within 500m of the site boundary.

Otter

Evidence of potential for otters includes:

- Evidence of otters (seeing otters, spraint, footprints, feeding remains)
- Watercourses / water bodies
- Woodland or rough grassland / scrub for holts and lying up

In relation to otter, the survey methodology conformed with that laid out in '*Chanin (2003) Monitoring the Otter*' and '*Liles (2003) Conserving Otter Breeding Sites*'. Any evidence of otter, such as places of rest (holts or couches), spraint sites, prints and slides, as well as any otter sightings would be recorded.

The survey area for otters comprised land within the site boundary.

Badger

Evidence of potential for badgers includes:

- Evidence of badgers (latrines, setts, footprints, fur, runs)
- Woodland for foraging and setts

In relation to badger, the survey methodology conformed with that laid out in '*Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines. Version 1.*'. Any evidence of badger, such as latrines, setts, footprints, fur and runs, as well as any badger sightings would be recorded.

The survey area for badgers comprised land within the site boundary.

Birds

Evidence of potential for breeding birds includes:

- Evidence of breeding birds (nests, nest building behaviour, courtship and display behaviour, distraction display, used nests or eggshells)
- Trees/woodlands for nesting
- Built structures for nesting
- Natural habitat features for nesting (watercourses, embankments, rough grassland)

In relation to breeding birds the survey methodology employed a simple 'look and see', Visual Encounter Survey technique in which the evidence identified above was recorded as encountered.

The survey area for birds comprised land within the site boundary and immediately adjacent the site boundary only.

Reptiles

Evidence for potential for reptiles includes:

- Evidence of reptiles (seeing reptiles, sloughed skin)
- Rough grassland
- South facing slopes

In relation to reptiles, the survey methodology involved a Habitat Suitability Assessment using the characteristics laid out in '*Natural England Technical Information Note TIN102 Reptile mitigation guidelines*' [WITHDRAWN].

The survey area for reptiles comprised land within the site boundary and immediately adjacent the site boundary only.

'Other Mammals'

Evidence for potential for 'other mammal' species:

- Evidence of 'other mammals' (seeing other mammals, droppings, burrows, mole hills)

In relation to 'other mammals', the survey methodology conformed with that laid out in '*The Mammal Society (2013). How to Find and Identify Mammals*'.

3.3. Timing

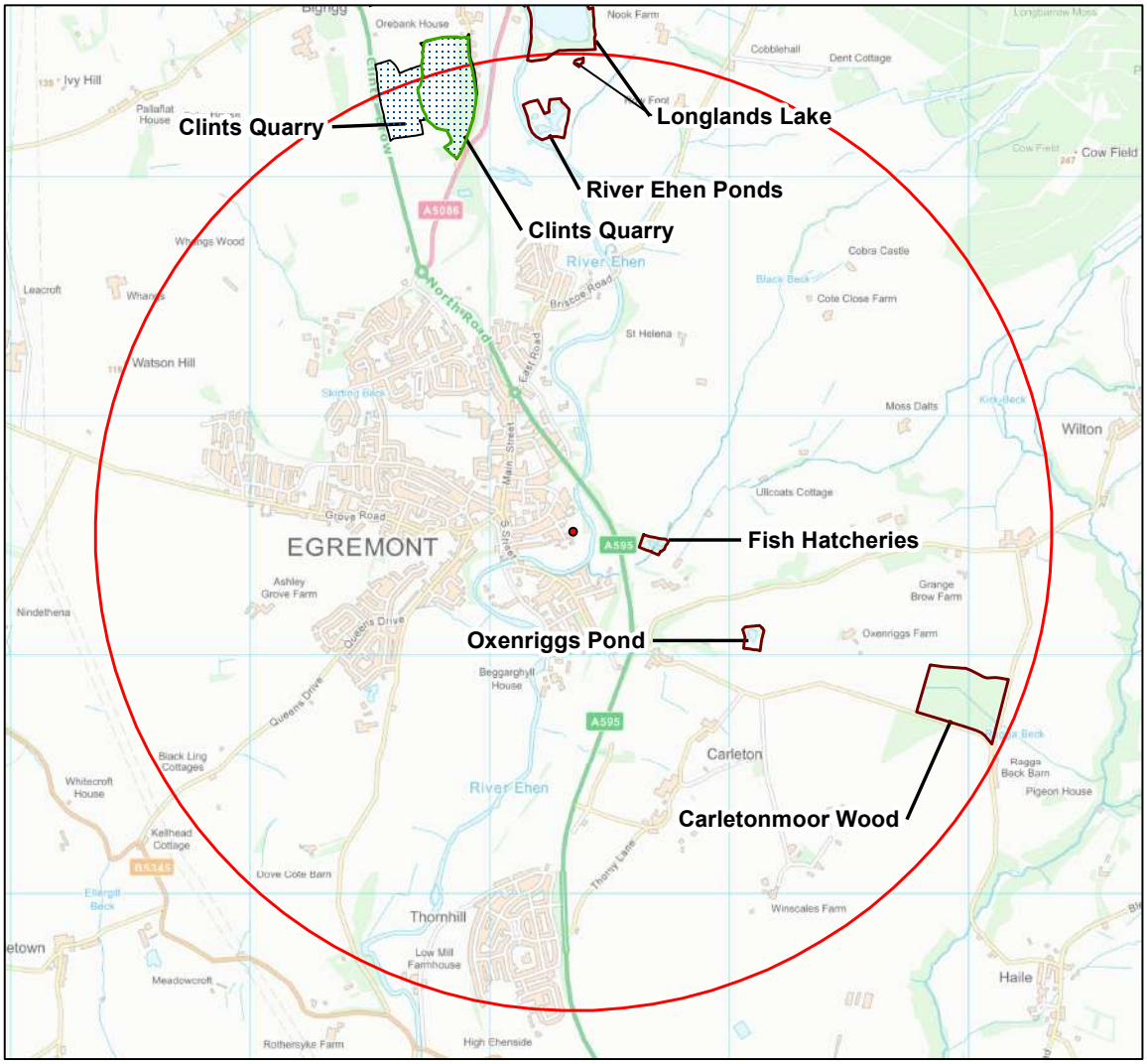
The initial survey was conducted on 22nd November 2023.

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

For: Sam Griffin at Hesketh Ecology

Site Name: Beck Green Nursery, Egremont
Centroid: NY 01350 10514
Buffer: 2km
Search Date: 22/11/2023

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



Key

County Wildlife Sites

Local Geological Sites

Site of Invertebrate Significance

0 250 500 1,000 m

Any queries in the first instance contact:

Dr Moustafa Eweda
GIS and Data Manager
Cumbria Biodiversity Data Centre (CBDC)

E: datamanager@cbdc.org.uk

TULLIE Tullie House Museum and Art Gallery Trust

Figure 3: *Cumbria Biodiversity Data Centre (CBDC): Non-Statutory Sites Search - Centroid: NY 01350 10514, Site Name: 'Beck Green Nursery, Egremont.', Search Buffer: 2km, Search Date: 22/11/2023.*

3.4. WEATHER CONDITIONS

Date	Activity	Weather conditions			
		Temp (°C)	Wind (Beaufort scale)	Cloud (%)	Precipitation
22/11/2023	Site inspection	12	0	80	None

Table 5: *Weather conditions.*

3.5. PERSONNEL

The site inspection and report were completed by Sam Griffin BSc ACIEEM.

4. Results

4.1. Designated Sites

Internationally Designated Sites

A search for all designated sites on Natural England's MAGIC website (http://www.magic.gov.uk) conducted on 29/11/2023 has confirmed that no internationally designated sites exist within a 2km radius of national grid ref. NY 01350 10514 (the approximate centre of the Site). The Site is not functionally connected to any more distant internationally designated site.

It is concluded that there are no potential impacts to any internationally designated site.

Domestically Designated Sites

A search for all designated sites on Natural England's MAGIC website (http://www.magic.gov.uk) conducted on 29/11/2023 has confirmed that a total of three domestically designated sites exist within a 2km radius of national grid ref. NY 01350 10514 (the approximate centre of the Site).

The domestically designated sites identified within 2km of the Site are as follows;

Clints Quarry SSSI - c.1.8km to the north, north west - is a terrestrial, former quarry site which has developed a rich limestone flora. The site is notified for the grassland and woodland habitats and its geological interest. Clints Quarry SSSI is in no way functionally connected to the Site.

Black Moss SSSI - c.1.3km to the east - is a small lowland raised bog, the only example of this rare habitat in the locality. Black Moss Lies at an altitude of 90 m O.D and is notified as an intact and unmodified lowland raised bog with associated bog communities, willow carr, peripheral woodland and scrub, acid marshy and semi-improved neutral grassland. Black Moss SSSI is in no way functionally connected to the Site.

Florence Mine SSSI - c.0.3km to the east - is a geological SSSI, notified for its excellent three-dimensional exposures through the largest 'flat'-type iron ore replacement body in the West Cumbria iron orefield. Florence Mine SSSI is in no way functionally connected to the Site.

Considering the scale of the proposed works and the lack of functional connectivity between the Site and any of these three SSSI's it is concluded that there are no potential impacts to any domestically designated site.

Locally Designated Sites

A detailed data search for all locally designated sites was commissioned from Cumbria Biodiversity Data Centre (CBDC) for all Locally Designated Sites within a 2km radius of Nat. Grid Ref. NY 01350 10514 (the approximate centre of the site). This revealed that the Site itself is not designated as a County Wildlife Site but that five County Wildlife Sites, a single Site of

Invertebrate Significance (SIS) and a single Local Geological Site exist within 2km of the site boundary (See Figure 2). The details of these are as follows;

- Longlands Lake County Wildlife Site; c. 2km to the north.
- Clints Quarry Local Geological Site; c.1.8km to the north, north west.
- Clints Quarry Site of Invertebrate Significance; c.1.8km to the north, north west.
- River Ehen Ponds County Wildlife Site; c.1.8km to the north.
- Carletonmoor Wood County Wildlife Site; c.1.8km to the south east.
- Oxenriggs Ponds County Wildlife Site; c.1km to the south east.
- Fish Hatcheries County Wildlife Site; c.0.4km to the east.

The Site is not directly adjacent to any locally designated site, and is not directly nor functionally connected to any such site via a distinct linear habitat feature.

Considering the scale of the proposed works and the lack of functional connectivity between the Site and any of these locally designated sites it is concluded that there are no potential impacts to any locally designated site.

4.2. Habitat Description

The Site lies on the eastern edge of Egremont, to the south of the Beck Green housing estate. The Site measures approximately 0.66ha and, as described in Section 1.2, is a former Council plant nursery.

The Site lies on the western bank of the River Ehen, with the eastern boundary fence lying <10m from the river bank at its closest point. The southern boundary adjoins an area of mown amenity grassland, the northern boundary is shared with private residential gardens to the north and the western boundary - via which site access is gained - fronts on to Cross Side.

The Site is currently broadly unmanaged, but some cutting back of encroaching scrub and self-seeded saplings has occurred at some point in the relatively recent past.

The Site currently contains the UK Habitat Classification habitat Built-up Areas and Gardens (u1). Approximately half of the Site is occupied by existing buildings, greenhouse structures and un-vegetated hard standing. The remainder of the Site consists of tall ruderal species, bramble scrub and self-seeded tree species.

Much of the Site is dominated by dense stands of nettles (*Urtica dioica*), creeping thistle (*Cirsium arvense*) and rosebay willowherb (*Chamaenerion angustifolium*). Other plant species identified include cocksfoot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), annual meadow grass (*Poa annua*), rough meadow grass (*Poa trivialis*), false oat grass (*Arrhenatherum elatius*), pendulous sedge (*Carex pendula*), soft rush (*Juncus effusus*), ragwort (*Jacobaea vulgaris*), broadleaved dock (*Rumex obtusifolius*), spear thistle (*Cirsium vulgare*), creeping thistle (*Cirsium arvense*), smooth sow thistle (*Sonchus oleraceus*), great willow herb (*Epilobium hirsutum*), ribwort plantain (*Plantago lanceolata*), great plantain (*Plantago major*), ox-eye daisy (*Leucanthemum vulgare*), daisy (*Bellis perennis*), silverweed (*Argentina anserina*), common knapweed (*Centaurea nigra*), meadow buttercup (*Ranunculus acris*), creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*), dandelion (*Taraxacum sp. agg.*). red campion (*Silene dioica*), hogweed (*Heracleum sphondylium*), field horsetail (*Equisetum arvense*), nipplewort (*Lapsana communis)*, sun spurge (Euphorbia helio-

scopia), shining crane's-bill (*Geranium lucidum*), herb Robert (*Geranium robertianum*), dove's-foot crane's-bill (*Geranium molle*), cut leaved crane's-bill (*Geranium dissectum*), hedge woundwort (*Stachys sylvatica*), ground elder (*Aegopodium podagraria*), common cleavers (*Galium aparine*), teasel (*Dipsacus fullonum*), scarlet pimpernel (*Anagallis arvensis*), colt's-foot (*Tussilago farfara*) and great mullein (*Verbascum thapsus*).

The self-seeded tree species include alder (*Alnus glutinosa*), hazel (*Corylus avellana*), sugar maple (*Acer saccharum)*, Salix sp., ash (*Fraxinus excelsior)*, hawthorn (*Crataegus monogyna*), red-osier dogwood (*Cornus sericea*) and elder (Sambucus nigra).

A single immature pedunculate oak (*Quercus robur*) exists to the east of the most northerly greenhouse and a semi-mature Roble tree (*Nothofagus obliqua*) exists adjacent the eastern boundary. All other semi-mature / mature trees on site are within the boundary and will be unaffected by the proposed works, but include hornbeam (*Carpinus betulus*), beech (*Fagus sylvatica*) and sycamore (*Acer pseudoplatanus*).

Being a former plant nursery, a number of apparently introduced species were also identified, including montbretia (Crocosmia sp.), Italian arum (*Arum italicum*), evening primrose (*Oenothera biennis* var.), Canada goldenrod (*Solidago canadensis*), domestic strawberry (Fragaria sp. var.), aster (Aster sp. var.), lavender (Lavandula sp. var.), green alkanet (*Pentaglottis sempervirens*), box (Buxus sp. var.), garden lady's mantle (*Alchemilla mollis*), Columbine (Aquilegia sp. var.) and tutsan (*Hypericum androsaemum*).

In addition to these relatively benign introduced species, a number of Schedule 9 invasive, non-native species were identified on site and immediately adjacent the Site boundary. These include Variegated yellow archangel (*Lamiastrum galeobdolon subsp. argentatum*), Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Reynoutria japonica*).

The habitat on Site is currently of no intrinsic conservation value and offers limited potential for any legally protected or priority species. No large mature trees exist on site, no open standing water (i.e. ponds) occur on site nor within the immediate area. Considering the extent of the proposed works, the zone of influence is limited to the area within the site boundary only.

4.3. Legally Protected Species

A data search was commissioned from Cumbria Biodiversity Data Centre for all records of rare, scare, protected or invasive non-native species within a 2km radius of nat. grid. ref. NY 01350 10514 (the approximate centre of the site). The search was conducted on 22/11/2023. This detailed biological records search returned a total of 2966 records of 178 rare, scarce and protected species.

With 2966 individual historic records of 178 species; species of all taxon groups are well recorded in this search area. However, historic biological records are of use in identifying potential presence of a species in an area, but should never be taken to imply likely absence. A lack of records is more likely to suggest lack of recorder effort than likely absence. This being the case, each species / species group is considered individually in relation to the site and the features of the site which may offer potential for the species / species group.

Taxon Group	Number of historic records	Number of species
Fungus	0	0
Lichen	0	0
Moss	0	0
Conifer	0	0
Flowering Plant	99	18
Chromist	0	0
Mollusc	2	1
Crusacean	0	0
Spider	0	0
Insect	184	24
Jawless Fish	0	0
Bony Fish	6	2
Cartilagenous fish	0	0
Amphibian	79	5
Reptile	17	3
Bird	2264	107
Marine Mammal	0	0
Terrestrial Mammal (including unidentified bat species)	315	18
TOTAL	2966	178

Table 6: *Summary of detailed biological records search from Cumbria Biodiversity Data Centre.*

4.4. BATS

Records obtained from Cumbria Biodiversity Data Centre include 20 historic records of bat species from within 2km of the site. These historic records positively identify five species, specifically common pipistrelle (*Pipistrellus pygmaeus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's bat (*Myotis daubentonii)*, noctule (*Nyctalus noctula*) and brown long-eared bats (*Plecotus auritus*) but records of 'bats', 'pipistrelles' and 'Myotis bat species' also exist.

Of the 20 historic records, 7 records explicitly refer to bat roosts with the remainder relating to 'field records', 'bat detector recordings', 'dung/droppings/frass/pellets, etc.', 'casualty (not road)' and 'killed by cat'. The closest historic record of a bat roost to the Site is soprano pipistrelle roost, recorded in 2010 as containing 62 individuals and in 2011 as containing 10 individuals. This is in a property on the Beck Green estate, but lies c.0.2km from the Site.

The Site does lie directly adjacent the River Ehen, which is lined at this point by a belt of trees beyond the eastern Site boundary. The River Ehen is highly likely to be used as a foraging site and commuting route for bats. It is understood that the trees adjacent the eastern site boundary will be retained and that no new lighting of the Site is proposed. This will ensure that the value of the adjacent river corridor is not affected by the proposed works.

The immature trees present on site do not offer any significant level of roost potential and will all be retained during the development. The areas affected by the proposed clearance and re-landscaping work are small and are highly unlikely to be significant to foraging bats and the proposed work will not alter the value of this habitat.

The risk of bat roosts being affected by the proposed vegetation clearance and groundwork is considered to be 'nil'. The Site itself is unlikely to be of significance to foraging or commuting bats in the wider area. No further survey effort is deemed to be necessary to be confident that the proposed works will not impact upon bats.

4.5. AMPHIBIANS

Records obtained from Cumbria Biodiversity Data Centre include 79 historic record of amphibians from within 2km of the site. These historic records positively identify five species, specifically common toad (*Bufo bufo*), common frog (*Rana temporaria*), smooth newt (*Lissotriton vulgaris*), palmate newt (*Lissotriton helveticus*) and great crested newt (*Triturus cristatus*). Great crested newts have been historically recorded in the former Carlton Quarry ponds (c.200m to the east of the Site) in 2011.

A review of data contained on Natural England's MAGIC website (http://www.magic.gov.uk) conducted on 30/11/2023 has identified a single 'Great Crested Newt Class Licence Return' approximately 1km to the west of the site but no granted 'European Protected species Applications' for great crested newts within 2km of the site boundary. A total of two ponds within 2km of the Site were subject to eDNA surveys between 2017-2019 as part of the 'Great Crested Newt Survey 2017-2019', these being at Clints Quarry (c.2km to the north) and a pond 160m to the east of the Site; both of these returned a negative survey result, suggesting 'absence' of GCN at this time.

The Association of Local Government Ecologists (ALGE) trigger list for when protected species surveys may be required suggests that any pond within 500m of a major proposal (one that is more than 10 dwellings or more than 0.5 hectares) or within 100m of a minor proposal (fewer than 10 dwellings or less than 0.5 hectares) may require full survey work for great crested newts unless a barrier to dispersal exists. Although no plans 'as proposed' have been provided, the development footprint is understood to be <0.5ha and can therefore be considered as a 'minor' proposal meaning that ponds within 100m of the site boundary should be identified and potentially surveyed for great crested newts if deemed to be suitable for this species. No ponds have been identified within 100m of the Site boundary.

The former Carlton Quarry Ponds which lie c.160-200m to the east, lie on the opposite side of the A595 and the River Ehen, both of which are likely to act as partial barriers to GCN movement through the landscape. No historic records of GCN exist from the western side of the road / river. Furthermore, an eDNA survey conducted in 2017-2019 returned a negative survey result.

The risk of great crested newts occurring on site is considered to be 'nil' and consequently the risk of great crested newts being affected by the proposed works is also considered to be 'nil'.

4.6. OTTERS

Records obtained from Cumbria Biodiversity Data Centre include 9 historic records of otter (*Lutra lutra*) within 2km of the site. These records relate to an individuals seen on the River Ehen, field signs on the River Ehen and road casualties on the A595.

Otter are now widespread in Cumbria and are likely to at least occasionally use *any* watercourse. The River Ehen lies directly adjacent the eastern boundary of the Site. It is highly likely that otter - at least occasionally - move along the River Ehen. No habitat suitable for otter exists within the development footprint, and the predicted zone of influence is limited to the area within the construction boundary only.

No evidence of otters having been present on the site was discovered during the site inspection.

The risk of otter holts and / or couches being affected by the proposed works is considered to be 'nil'. The risk of individual otters being affected by the works is also considered to be 'nil'.

4.7. BADGERS

Records obtained from Cumbria Biodiversity Data Centre include 4 historic records of badger (*Meles meles*) within 2km of the site. These records are of road casualties on the A595 and of active setts. Two active setts are identified, one approximately 2km from the Site boundary and one approximately 1km from the Site boundary.

Being located on the urban fringe of Egremont town, the site is rather disturbed and of limited suitability for badgers. The proposed development footprint contains no habitat suitable for badger setts and contains habitat of limited suitablity for foraging badgers.

No evidence of badgers having been present on the Site was discovered during the site inspection.

The risk of badger being affected by the proposed works is considered to be 'nil'.

4.8. Reptiles

Records obtained from Cumbria Biodiversity Data Centre contains a total of 12 historic records of reptiles within 2km of the site. The reptile species previously recorded within the search area are common lizard (*Zootoca vivipara*), slow worm (*Anguise fragilis*) and adder (*Vipera berus*). The closest historic record of a reptile species to the site is a common lizard c.0.3km to the east of the Site.

The following list gives characters that influence reptile habitat suitability;

- Location in relation to species range
- Vegetation structure
- Isolation
- Aspect
- Topography
- Surface geology
- Connectivity to nearby good quality habitat
- Prey abundance
- Refuge opportunity
- Hibernation habitat potential
- Disturbance regime

The site is superficially suitable for reptiles, but is isolated from any adjacent areas of suitable habitat and remote from known populations.

The risk of reptiles being affected by the proposed works is considered to be 'nil'.

4.9. Breeding Birds

Records obtained from Cumbria Biodiversity Data Centre include 2264 records of birds relating to 107 species occurring within 2km of the site. The majority of species recorded are identified as either possible, probable or confirmed as breeding. The precise location of bird records, specifically nest sites, is rarely provided in historic data.

The Site - and the entirety of the proposed development footprint - is suitable for breeding birds. The vegetation structure and the disturbance regime make the site suitable for a range of common birds. It is certain that birds will breed within trees and scrub within the Site and adjacent to the Site boundary.

If vegetation clearance is conducted during the bird breeding season, there is a 'high' risk that breeding birds will be harmed. If vegetation clearance is conducted outside of the bird breeding season there is 'no' risk of harming breeding birds.

4.10. Red Squirrels

Records obtained from Cumbria Biodiversity Data Centre included 48 records of red squirrels (*Sciurus vulgaris*) and 47 records of grey squirrels (*Sciurus carolinensis*) within 2km of the site. Both red and grey squirrels have been previously recorded in suitable habitat throughout the wider area.

Although trees do exist within the Site and adjacent to the Site boundary, it is understood that no trees will be felled.

The risk of red squirrels being affected by the proposed works is considered to be 'nil'.

4.11. Other Mammals

Records obtained from Cumbria Biodiversity Data Centre include records of roe deer (*Capreolus capreolus*), hedgehog (*Erinaceus europaeus*), stoat (*Mustela erminea*), weasel (*Mustela nivalis*), American mink (*Neovison vison*), common shrew (*Sorex araneus*), pygmy shrew (*Sorex minutus*), brown hare (*Lepus europaeus*) and rabbit (*Oryctolagus cuniculus*) from within 2km of the site.

Rabbits were the only mammal species confirmed to occur on Site during the survey. No other evidence of mammal species was identified and no other burrow systems (e.g. rabbit warrens etc.) were discovered.

The risk of 'Other mammals' being affected by the proposed works is considered to be 'low'.

4.12. Invasive Non-Native Species

Records obtained from Cumbria Biodiversity Data Centre include historic records of 3 Schedule 9 - Invasive Plant Species occurring within 2km of the site. These are Himalayan balsam (*Impatiens glandulifera*), Rhododendron (*Rhododendron ponticum*) and Japanese knotweed (*Fallopia japonica*).

During the survey a total of three Schedule 9 invasive non-native species was identified on Site. These are Himalayan balsam (*Impatiens glandulifera*), Variegated yellow archangel (*Lamiastrum galeobdolon subsp. argentatum*) and Japanese knotweed (*Fallopia japonica*).

- **Himalayan balsam** occurs across the Site, predominantly on the eastern side - presumably having spread from the river corridor, but is also found away from the river. This presents a likelihood that the seed bank will contain Himalayan balsam seeds and that disturbance of the ground will allow Himalayan balsam to germinate.

- **Variegated yellow archangel** occurs in a discreet patch on the northern boundary. Variegated yellow archangel typically spreads via rhizomes rather than seed, but could be caused to spread during vegetation clearance works.

- **Japanese knotweed** occurs primarily outside of the perimeter fence on the eastern side, but it is likely that rhizomes extend well within the Site and could be spread should any excavation occur within 10m of the above ground growth.

The risk of invasive non-native species currently growing on site being spread within or beyond the site boundary is currently considered to be 'high'.

The generic risk of invasive non-native species being introduced to the site and then spread within or beyond the site boundary is considered to be 'negligible'.

5. Photographs

Figure 4: *Showing the dense stands of nettle in the area proposed for clearance.*

Figure 5: *Showing the dense stands of nettle in the area proposed for clearance adjacent the northern boundary.*

Figure 6: *Showing trees within the eastern boundary with the River Ehen beyond.*

Figure 7: *Showing areas of hardstanding to the south of the Site with existing green-houses beyond.*

Figure 8: *Showing Himalayan balsam growing within the area proposed for clear-*

Figure 9: *Showing variegated yellow archangel growing adjacent the northern boundary.*

Figure 10: *Showing Japanese knotweed growing adjacent the eastern boundary.*

Figure 11: *Showing Roble tree growing adjacent the eastern boundary.*

6. Impact Assessment

6.1. Summary of Predicted Impacts

This survey has identified potential ecological impacts to;

- Breeding Birds
- 'Other mammals'
- Invasive non-native species

Each of these features will be discussed below.

6.2. Breeding Birds

If vegetation clearance is conducted during the bird breeding season, there is a 'high' risk that breeding birds will be harmed. If vegetation clearance is conducted outside of the bird breeding season there is 'no' risk of harming breeding birds.

- Harm to breeding birds. If vegetation clearance occurs during the breeding season there is a risk that nests may be incidentally destroyed, or exposed leading to harm.

6.3. 'Other mammals'

'Other mammals', including burrow dwelling species may occur on site. There is a risk that 'other mammals' will be affected by the proposed works.

The proposed works could have the following impacts;

- Harm to burrow dwelling mammals. Burrow dwelling mammals (i.e. moles) could be crushed or asphyxiated in burrows if heavy plant is operated on ground above active burrows.

6.4. Invasive Non-Native Species

During the survey a total of three Schedule 9 invasive non-native species was identified on site.

The risk of invasive non-native species currently growing on site being spread within or beyond the site boundary is currently considered to be 'high'.

Potential risks around invasive non-native species as a result of activities on site include;

- Spread of invasive non-native species already present on Site, both within and beyond the Site boundary. There is a risk that invasive non-native species could be spread via seeds or vegetative material adhering to plant, equipment or materials (particularly top soil) moved around the Site or beyond the Site boundary via seed or vegetative material adhering to plant / equipment leaving the site.

Figure 12: *Showing the location of the three Schedule 9 Invasive Non-Native Species identified on Site.*

7. Mitigation / Recommendations

The following potential impacts have been identified;

- Breeding Birds
  - Harm to breeding birds
- 'Other mammals'
  - Harm to burrow dwelling mammals
- Invasive non-native species
  - Introduction of an invasive non-native species via materials or equipment delivered to site.

7.1. Breeding Birds

The recommended mitigation measures to reduce the risk of harm to breeding birds are as follows;

- Vegetation clearance and / or movement of stored materials on site should occur out- side of the bird nesting season (March - August).

- If any vegetation clearance and / or movement of materials on site must occur during the bird breeding season, a breeding bird survey must be conducted immediately prior to vegetation clearance commencing. Should evidence of active nest sites (or depend- ant young) be identified, no work will be possible until the nest can be confirmed as no longer active or the young have fledged and / or moved out of the works area. This should be conducted by a suitably experienced ecologist.

7.2. "Other mammals'

The recommended mitigation measures to reduce the risk of harm to burrow dwelling mammals are as follows;

- All plant operatives will be vigilant for mammal burrows. If burrows are discovered, no plant will operate within 5m of any burrow entrance until an experienced ecologist can confirm if the burrow is active. If burrows are found to be active, measures will be taken to exclude mammals before works in the area may proceed.

7.3. Invasive Non-Native Species

The recommended mitigation measures to reduce the risk of spreading invasive non-native species on / off site are as follows;

- All above ground growth of Himalayan balsam and variegated yellow archangel identified as growing on Site should be removed entirely from the Site in an appropriate manner prior to any landscaping or movement of topsoil. Care must be taken to remove the entire plant, including all roots, so as to avoid the plant regenerating from fragments of vegetative material left on site.

- No excavation of ground within 10m of the identified stand of Japanese knotweed should occur, and a ‘no dig’ exclusion zone established so as to prevent the accidental spread of this species (the above ground growth of which is without the site boundary).

- The Site must be monitored on an ongoing basis for the presence of Himalayan balsam and variegated yellow archangel which may recolonise the Site via regeneration from vegetative material or the seed bank.

- All plant and equipment will be washed to remove any mud or debris prior to being delivered to site.

- All materials delivered to site must be clean and free from contamination with seeds or vegetative material from invasive non-native species and certified as such by the supplier.

- All plant and equipment will be thoroughly washed to remove any mud or debris prior to being removed from the site.

- No spoil (top soil, sub-soil, aggregate etc.) will be delivered to the site nor removed from the site unless confirmed as being free of invasive non-native species, or otherwise to an appropriate facility as contaminated waste.

8. Summary

8.1. Summary of development and mitigation

This report details a Preliminary Ecological Appraisal conducted at the Growing Well Site, Beck Green Nursery, Egremont, Cumbria, CA22 2AS (Nat. Grid Ref. NY 01350 10514 - Approx. centre of site).

Indicative plans ‘as existing’ and ‘as proposed’ have been provided (See Table 1 and Figure 2) and it is thereby understood that a proposal exists to develop the former Copeland County Council plant nursery into a ‘Growing Well’ facility. ‘Growing Well’ is a therapeutic community mental health service which seeks to assist recovery from mental health challenges through supported activity in the outdoors, within a real-world horticulture enterprise, supported and guided by experienced therapeutic growers and mental health support staff.

The Site currently contains the UK Habitat Classification habitat Built-up Areas and Gardens (u1). Approximately half of the Site is occupied by existing buildings, greenhouse structures and un-vegetated hard standing. The remainder of the Site consists of tall ruderal species, bramble scrub and self-seeded tree species.

The habitat on Site is currently of no intrinsic conservation value and offers limited potential for any legally protected or priority species. No large mature trees exist on site, no open standing water (i.e. ponds, ditches or watercourses) occur on site nor within the immediate area. The zone of influence is limited to the area within the construction boundary.

This survey has identified potential ecological impacts to;

- Breeding Birds
- ‘Other Mammals’
- Invasive non-native species

Mitigation measures have been presented in Section 7 to address identified potential impacts to ecological receptors. Provided that these measures are adhered to, no residual ecological impacts as a result of the proposed works are anticipated.

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