



Ecological Impact Assessment

Seiont Manor Llanrug, Gwynedd

April 2021



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Date: 09/04/2021

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Date: 09/04/2021

Project No: J000196 REV 3

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APPENDIX ONE EXTENDED PHASE 1 HABITAT PLAN

APPENDIX TWO PROPOSED DEVELOPMENT PLANS

APPENDIX THREE BIOLOGICAL RECORDS (SUMMARY ONLY)

APPENDIX FOUR PREVIOUS BAT REPORTS, OVERWINTERING AND BREEDING BIRD REPORT, REPTILE SURVEY REPORT.

1. Summary

Seiont Manor Hotel occupies nearly nine hectares alongside the Seiont River just outside the Snowdonia National Park. A range of habitats and features were identified across the site including ponds, wet woodland, broadleaf and coniferous plantations, semi-improved acid grassland, improved grassland, scattered trees and dry-stone walls of site and local importance. The River Seiont forms the northern boundary.

Design plans for extensions to the hotel, car parking, tennis courts, staff accommodation and the construction of 39 lodges within the grounds have been assessed. The essence of the proposed development is the creation and management of a park set in the highest quality environment. This report identifies and evaluates the key ecological features and species of the site. It assesses the impact of the development and details measures to protect receptors and mitigate adverse effects. Full use of the entire site will enable extensive ecological enhancement measures to be adopted, with benefits for wildlife throughout the wider landscape.

The proposed development will affect a range of species and habitats which include:

- Otters
- Reptiles
- Breeding birds
- Grassland and wetland mosaic habitat
- Improved and amenity grasslands
- Broadleaved trees

Suitable mitigation measures have been drawn up for all of these. There will be no impacts on any of the nearby Protected Sites. Areas of amenity grassland and improved grassland will be lost but these are generally of low ecological value. Additionally mitigation measures will replace these with habitats of higher ecological value.

Ecological constraints have informed the design process and a wide range of measure have been adopted to avoid impacts all together. Suitable Mitigation measures have been recommended where impacts cannot be avoided and are detailed in this report. These include the creation of woodland migration routes for otters, tree planting and tree protection, the avoidance of impacts to ancient woodland, and the translocation of wetland grasses.

An extensive range of measures to enhance the biodiversity of the site have also been made and to ensure that the scheme achieves an overall gain in biodiversity. The change in use from agriculture to recreation will enable a range of significant habitat improvements to be made including:

- New Woodland Planting and additional native species tree planting
 - Restoration of Acid Grasslands
 - Restoration of existing ponds and creation of new pond
 - Restoration and management of existing neglected woodlands
 - General Landscape Enhancement
 - Provision for new Blue / Green Roof to the Hotel extension
 - Provision of bird and bat boxes
-

Due to the wide range of species and habitats which are present, it is recommended that a Landscape and Environmental Management Plan (LEMP) is drawn up to cover all the mitigation and enhancement measures which are recommended. This will detail all of the mitigation and enhancement measures outlined in this report, including roles and responsibilities for supervision of all works, site monitoring post completion, and long-term site management.

Further surveys for otters and badgers should be undertaken prior to the commencement of construction.

The proposed lodge development is located a short distance from a group of disused and partly ruined farm buildings. Previous bat surveys have been unable to ascertain whether bats were present within the buildings. The buildings will not be affected by the development and extensive mitigation measures have been proposed to ensure bats can migrate to and from the river corridor and forage locally. Further surveys for Bats will be required during 2021 to determine whether any additional mitigation may be required.

Due to the large number of mitigation and enhancement measure required, we recommend that a Landscape and Environmental Management Plan (LEMP) be prepared to ensure all works are undertaken to specification and in a timely manner.

Importance has been given to the comments made by the Gwynedd Council, including the Environment Department, and the pre application feedback has been incorporated in the latest proposal. Specifically:

- the residential development adjacent to the existing pond has been removed to diminish the built impact on the natural environment. In its place, two tennis courts are proposed, enclosed by new tree planting and improved landscaping to create a green 'connecting corridor'.
- The previous number of lodges has been reduced by 22%, passing from 50 No. to 39 No. units. Careful consideration has also been given to their location and alignment:

the existing trees and woodland have been retained, maintaining a 30 meters buffer area from Glan Seiont woods and a new corridor for the otter migration has been created in the eastern part of the site to connect the Seiont River to the existing large pond.

- A blue green roof has also been incorporated in the design of the spa and hotel extension. The aim is to diminish the built impact of the proposal, to integrate the building with the surrounding natural environment, to assist in the storing and managing of rainwater and to help the wildlife diversity.

The latest proposal has been refined to limit its impact on the existing natural environment and to enhance the landscape, promote ecological biodiversity and respect the uniqueness of the site. The revised Scheme layout enables extensive ecological mitigation and enhancement measures to be undertaken across the entire site on a landscape scale. This will create a high-quality environment for visitors and help improve biodiversity within the Seiont Valley as a whole.

2. Introduction

Land and Heritage have been commissioned by Caernarfon Properties Ltd to undertake an Ecological Impact Assessment to determine the ecological status of land at Seiont Manor, Llanrug Gwynedd LL55 2AQ. A Preliminary Ecological Appraisal (PEA) was undertaken in December 2017 to inform the design of a previous Scheme, and to determine if any additional ecological surveys should be undertaken. During 2018, surveys were undertaken with respect to overwintering and breeding birds, bats, otters and reptiles. The site was visited by the County Ecologist in 2018 and her observations and advice were incorporated into the previous report which has been used to inform the current design. This PEA has been produced for a similar Scheme proposal but with a revised layout and a smaller Scheme boundary. The entire site has been re-surveyed, and a new ecological impact assessment undertaken. The revised layout creates opportunities for extensive ecological enhancement measures to be adopted across the entire site.

The updated baseline data has been used to assess the impact of the proposed Scheme. Recommendations have been made for impact avoidance, ecological mitigation and enhancement.

2.1 Appraisal Objectives

The objectives of the Ecological Impact Assessment are to assess the effects of the proposed Scheme on ecological receptors within or adjacent to the site and the effects to Statutory and non-Statutory Designated sites.

A Preliminary Ecological Appraisal (PEA) was undertaken to ascertain the habitat types and key ecological issues relating to the development proposal. This included identifying potential impacts upon designated species and habitats and determining whether there was a need for more detailed surveys of notable plant and animal species.

Sufficient ecological information is required to fully inform the site design and the proposed works. The PEA identified the ecological constraints at the site and made recommendations for further ecological surveys which have been undertaken. The conclusions from these surveys have been incorporated into this report. Likely ecological impacts have been assessed based on the development plans shown in Appendix three. Proposals for suitable mitigation have also been made.

The adoption of the mitigation proposals will enable the project to satisfy current UK and European legal wildlife requirements, as well as national and local planning regulations. All public bodies have statutory obligations under the Natural Environment and Rural Communities Act 2006 to conserve and enhance biodiversity.

A review of the ecological impacts must be undertaken once detailed layouts are available, so that suitable amendments to mitigation measures can be made.



2.2 Scope of Works

Sufficient ecological information is required to fully inform the site design and the proposed works. The Preliminary Ecological Appraisal comprises the following elements:

- Desktop study of available site information.
- Phase 1 Habitat survey of the site.
- Assessment of the potential impacts of the proposed scheme.
- Appraisal of the requirements for further survey work.
- Appraisal of the requirements for mitigation and potential for enhancement measures.

2.3 Site Location and Description

The Application Site, hereafter referred to as the Site, is located to the west of the village of Llanrug at National Grid Reference SH 52826 63838. Post code LL55 2AQ

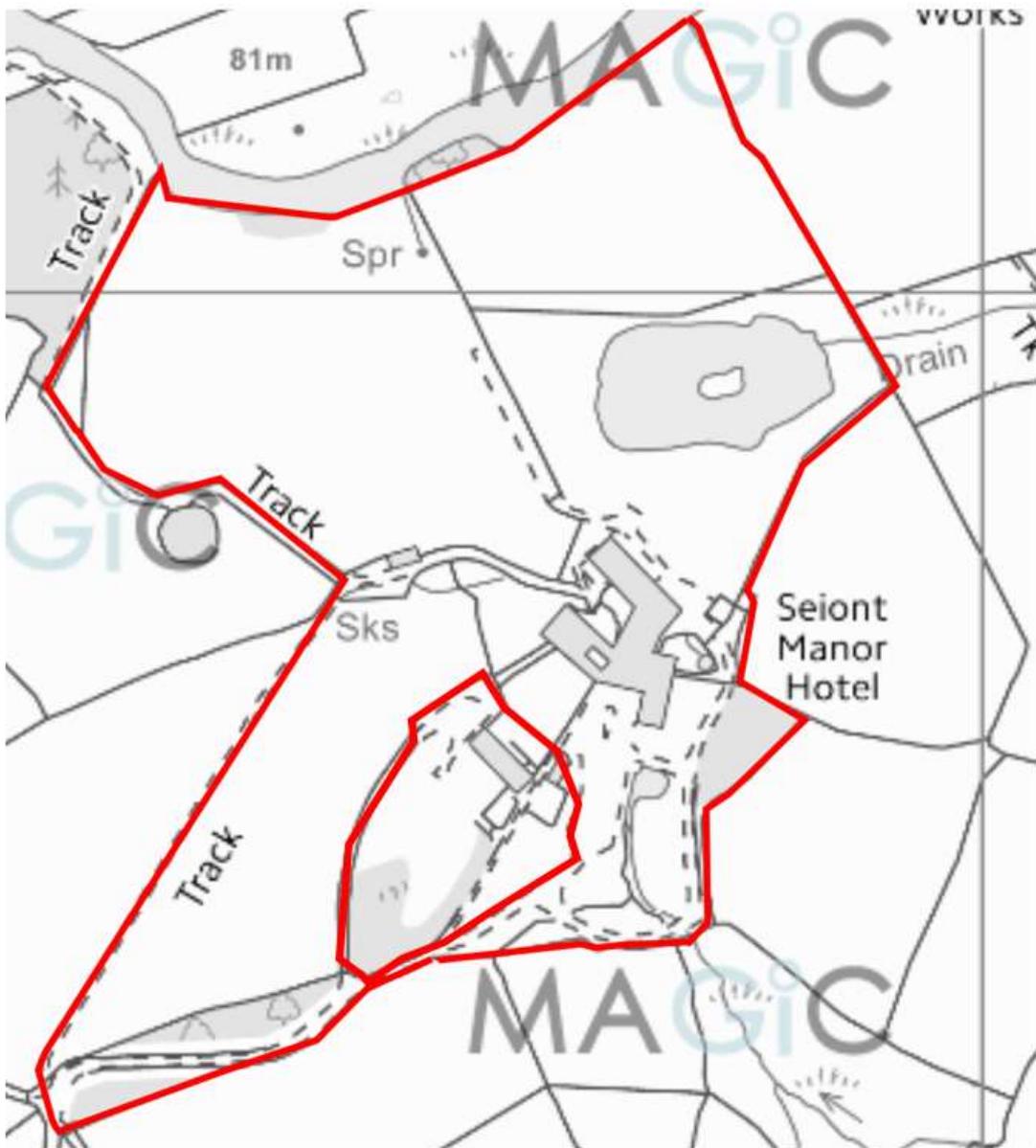
The Site extends to 8.7ha lying between the A4086 road and the Afon Seiont along the northern boundary.

The previous report included a disused manor house (formerly Llwyn y Brain) and its grounds. These no longer form part of the overall holding and have been excluded from this report.

Figure 1: Site Location Plan



Figure 2: Site red line boundary



2.4 Proposed Development

Plans include an extension to the existing hotel, construction of a car park and tennis courts, and construction of 39 holiday lodges. The Scheme Layout Plans can be seen in Appendix 2.

3. National Legislation

The Wildlife and Countryside Act (WCA) 1981 (as amended) is the principal mechanism for the legislative protection of wildlife in the UK and is divided into four parts, the first section of which details the protection of wildlife. This legislation protects wild animals listed on Schedule 5 and wildflowers which are listed on Schedule 8. All wild birds and their eggs and nests are protected, with special protection for birds listed on Schedule 1. Invasive plants listed on Schedule 9 must not be spread or propagated in any way.

The Conservation of Habitats and Species Regulations 2010 protects animals listed on Schedule 2 and plants listed on Schedule 5, also known as European Protected Species. The Regulations allow the designation and protection of Special Areas of Conservation (SACs), Special Protection Areas (SPA's) and RAMSAR sites. These are collectively known as Natura 2000 sites. A development which would have an adverse effect on the conservation interests for which a Natura 2000 area has been designated should only be permitted where:

- There is no alternative solution; and
- There are imperative reasons of over-riding public interest, including those of a social or economic nature.

Where a priority habitat or species (as defined in Article 1 of the Habitats Directive) would be affected, prior consultation with the European Commission is required unless the development is necessary for public health or safety reasons. These conditions also apply to any European protected species that may be present.

The Protection of Badgers Act 1992 provides protection to badgers and their setts from injury/fatality, damage and any form of disturbance; however, this does not extend to the protection of other habitats badgers may utilise.

The Natural Environment and Rural Communities (NERC) Act 2006 places an obligation on all Local Planning Authorities to conserve and protect biological diversity and the natural environment. Section 40 of the Act concerns biodiversity and states: 'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercising of those functions, to the purpose of conserving biodiversity.' The Act states that: 'it is important that public authorities seek not only to protect important habitats and species, but actively seek opportunities to enhance biodiversity through development proposals, where appropriate.' This legislation also details those species for each county that are of Principal Importance for Conservation of Biological Diversity.

Section 6 of The Environment (Wales) Act 2016 places a specific duty on public authorities to "*seek to maintain and enhance biodiversity in the exercise of their functions in relation to Wales*".



" In complying with subsection (1), a public authority must take account of the resilience of ecosystems, in particular the following aspects -

- (a) diversity between and within ecosystems*
- (b) the connections between and within ecosystems*
- (c) the scale of ecosystems*
- (d) the condition of ecosystems (including their structure and functioning)*
- (e) the adaptability of ecosystems."*

The Act requires local authorities to enforce the Biodiversity Duty which is a positive duty to enhance Nature Conservation.

- local authorities are also encouraged through planning guidance to enhance as well as conserve biodiversity.

UK Biodiversity Action Plans (UK BAP) do not provide any legal protection for the habitats or species listed but highlights those that are of conservation concern, detailing why they are of concern and the actions required to prevent further declines and to encourage habitat/population expansion. Three types of Action Plan (Species Action Plans (SAPs), Habitat Action Plans (HAPs) and Local Biodiversity Action Plans (LBAPs)) have been developed by the UK Biodiversity Action Plan steering group which set priorities for nationally and locally important habitats and wildlife. It is this BAP framework that forms the basis of the habitat and, to a certain extent, the species surveyed for this scheme.

The Natur Gwynedd Biodiversity Action Plan contains both HAPs and SAPs which are relevant to this scheme including the wet woodland HAP and the SAPs for otters and lesser horseshoe bats.

The statutory basis for species and habitats listed in BAPs is provided by Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Species of principal importance for the conservation of biodiversity in England (as identified under the Countryside and Rights of Way Act, 2000 (CROW Act, 2000)) should be protected from adverse impacts of development. To ensure that the habitats of these species are not adversely impacted upon, the planning authority may impose planning conditions or obligations.

3.2 Planning Policy

Relevant policies for Wales include.

- Future Wales: The National Plan 2040 (February 2021)
- Planning Policy Wales (Edition 11: 2021)
- Welsh Government Technical Advice Note 5 Nature Conservation and Planning (2009)
- Anglesey and Gwynedd joint Local Development Plan (2017)



- Gwynedd Supplementary Planning Guidance – Wildlife Sites (2009)

A letter from the Welsh Government Chief Planner to all Planning Authorities in October 2019, clarified the requirement of applications to achieve a net benefit for Biodiversity.

Policy 9 of the National Plan sets out Policy relating to “Resilient Ecological Networks and Green Infrastructure” and advises that:

In all cases, action towards securing the maintenance and enhancement of biodiversity (to provide a net benefit), the resilience of ecosystems and green infrastructure assets must be demonstrated as part of development proposals through innovative, nature-based approaches to site planning and the design of the built environment.

Planning Policy Wales (PPW) 11 sets out that “*planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity*” (para 6.4.5 refers).

PPW confirms that Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity.



4. Assessment Methodology

4.2 Desktop Study

To accurately assess the potential ecological impacts of the scheme, a desktop study has been undertaken to identify the presence of sensitive ecological receptors at the site and within the surrounding area. Data has been obtained from a range of information sources including:

- NRW website data
- National Biodiversity Network (NBN);
- Cofnod (Local Environmental Records Centre for North Wales)

Information from Cofnod has included details of statutory and non-statutory conservation designation within close proximity to the site, with additional information supplied by the NRW. Ecological data obtained from NBN and Cofnod provides data relating to protected and notable species recorded within the local area. Specific wildlife records provided by Cofnod are confidential, but information may be made available on request subject to the Cofnod terms and conditions.

4.3 Ecological Walkover Survey

This assessment follows the methodology of a Phase 1 Habitat Survey, which aims to identify habitat features of value to different plant and animal groups. The methodology used for this survey implements those detailed by the Institute of Environmental Assessment (IEA) (1995) and the Joint Nature Conservation Committee (JNCC 2010).

A site visit was completed to map general habitats present in the area. The survey also aimed to record any evidence of the species groups outlined below, including habitat features with the potential to support them:

- Nesting birds, particularly specially protected species;
- Animal species protected under UK legislation and European legislation;
- Invasive species, particularly Japanese Knotweed and Giant Hogweed which are listed under UK legislation.

This information allowed the requirement for more detailed species surveys to be evaluated.

Baseline Evaluation Criteria

Based upon the desk study and site surveys, an ecological evaluation of the site was undertaken using a combination of evaluation criteria for habitats and species, although the general framework follows that provided by CIEEM (IEEM 2006) (see Table 1 below).

Where relevant the evaluation was made with reference to the statutory protection afforded to species and habitats.

Table 1: Ecological Value Description

Ecological Value	Description and Examples
High	Habitats or features that have high importance for nature conservation, such as statutory designated nature conservation sites of international or national importance or site maintaining viable populations of species of international or national importance (e.g. Red Data Book species; European Protected Species).
Medium	Sites designated at a county or district level, e.g. Local Wildlife Sites (LWS), ancient woodland site, ecologically 'important' hedgerows or ecological features that are notable within the context of region, county or district (e.g. a viable area of a Priority Habitat on the county BAP or a site that supports a viable population of a county BAP species).
Low	Sites of Nature Conservation value within the context of a parish or neighbourhood, low grade common habitats, such as arable fields and improved grasslands and sites supporting common, widespread species.



5. Desktop Study

5.2 Statutory Designated Sites

There are a total of 490 wildlife records on the Cofnod database within 2km radius of the Seiont Manor Hotel. There are 256 bird records and 46 recorded sightings of European Protected Species.

There are no Statutory European Protected Sites within 2km of the Scheme. There are no Sites of Special Scientific Interest or Local Nature Reserves within 2km of the Scheme.

Nearby Protected Sites include the Glynllifon SAC (9km) and the Menai Straits SSSI (6km). Neither will be affected by the Scheme.

We have considered the details of the Proposed Development and have concluded that there will be no direct or indirect effects on any Protected Sites.

5.3 Non-Statutory Designated Sites

5.3.1 Local Wildlife Sites

There are 35 Wildlife Sites within a 2km radius of the Site. These are shown on the plan in Appendix three.

The Penryn Stud Wildlife Site extends to the north bank of the Afon Seiont which is also part of the Scheme boundary. No other Wildlife sites are likely to be affected by the Scheme.

5.3.2 Ancient Woodlands

There are twelve areas of Ancient Woodland listed on the Ancient Woodland Inventory within 2km of the Site. The nearest of these is Glan Seiont which is close to the Scheme boundary.

5.4 Species Records

Records of protected and notable species have been provided by Cofnod. Records submitted within a 2km radius of the Site since 2000 have been described below.



5.4.1 European Protected Species

5.4.1.1 Mammals

There are records for brown long-eared bat, lesser horseshoe bat and pipistrelle species at Llewyn y Brain. Surveys undertaken from 2013 – 2018 have consistently confirmed the presence of hibernation roosts for lesser horseshoes.

There is a record for badger close to the lodge house by the Llanberis Road. There are also records for otters close to the Llanberis road. The previous survey of 2018 recorded otters along the Afon Seiont and at the hotel pond.

5.4.2 Other Protected Species

There are no records for amphibians or reptile species within the Scheme boundary, but common lizards have been recorded at Llanrug.

Atlantic salmon, brown/sea trout and eel are recorded for the Afon Seiont.

5.4.2.1 Birds

Forty-nine species of bird have been recorded within 2km of the Site since 2000. Barn owl, chough and red kite have all been recorded locally.

The Cofnod records include Extended Phase 1 Habitat map data for the site area. This shows predominantly improved grassland with areas of woodland and marshy grassland.

5.5 Tree Preservation Orders (TPOs)

Information obtained from Gwynedd Council confirms that there are no tree preservation orders within, or immediately adjacent to the Site. The Site is not within any Conservation Areas.

6. Site Survey Findings and Potential Impacts

A walkover survey was undertaken on the 10th of February 2021 by a suitably qualified ecologist in fair weather conditions. The overall conclusion was that the condition and extent of the principal habitats had not changed significantly since the previous surveys (2017/18). Agricultural practices at Seiont have been consistent over this period.

6.2 Habitats

Habitats recorded during the site survey have been categorised in line with JNCC Phase 1 Habitat Classification. The distribution of habitats across the sites is shown on the Phase 1 Habitat Plans attached in Appendix One These habitat types are described within the following sub sections.

A selection of photographs taken during the walkover survey are included in Figure 2.

Figure 2: Photographs taken during the Site Walkover Survey

Seiont River, acid grassland and County Wildlife Site



Lake and surrounding wet woodland.



Figure 2: Photographs taken during the Site Walkover Survey

Mature Parkland Trees



Dry-stone Walls



Amenity Grassland



Wet grassland mosaic





6.2.1 Improved Grassland (JNCC Code: B4)

The majority of the site comprises Improved Grassland. This is pasture which has been regularly fertilised and possibly overseeded.

6.2.2 Semi Improved Acid Grassland (JNCC Code: B1.2)

Some small areas of acid grassland were identified within the improved grassland alongside the river. This is on steeper ground with restricted access for agricultural machinery. The slopes are also close grazed by sheep making it difficult to assess its overall value but there is likely to be a greater variety of forbes and are of local value. Waxcap fungi were present here and are characteristic of acid grassland. Part of this grassland also falls within the Local Wildlife Area.

6.2.3 River (JNCC Code : G2)

The Afon Seiont forms the northern boundary of the site. The salmonid river is fast flowing, oligotrophic and liable to regular spate flooding from the mountains. The riparian corridor is characterised by stone boulders and emergent vegetation which is frequently disturbed by the river.

A small stream runs to the south of the hotel where it appears to be culverted under the buildings. It reappears near the farm buildings below the hotel and runs to the west.

6.2.4 Lake (JNCC Code : G1.1)

The large pond (approximately 1000 m²) has been created on part of a dry stream bed which runs parallel to the current course of the river. It is part of a series of ponds which are located on the adjoining property to the east. It is likely that these were originally constructed as flight ponds for shooting. The Seiont Manor pond was stocked with fish until approximately 10 years ago. Water quality appeared to be good.

There is a small pond (5m diameter) just to south east of the entrance by the lodge. It is situated within a group of trees and is very shady. In the past here appears to have been a pond in front of the farm buildings below the hotel. The site has silted up and the stream runs to one side.

6.2.5 Amenity grassland (JNCC Code : J1.2)

There is an area of grassland on the south side of the lake which is mown on a regular basis as a lawn area for hotel guests.



6.2.6 Scattered Trees (JNCC Code : A3.1)

A number of mature oak trees (*Quercus petraea*) were recorded across the site and around the hotel buildings. Other mature specimen trees include ash, sycamore and horse chestnut. Many of these trees are important within the landscape. Some have a number of Potential Bat Roost Features e.g. splits in branches, hollows in the trunks and flaking bark.

6.2.7 Continuous Scrub (JNCC Code: A2.1)

There are areas of dense bramble growth close to the pond.

6.2.8 Introduced Shrub (JNCC Code J1.4)

There are several areas of dense shrub planting in the hotel garden area. These form part of the habitat assemblage suitable for breeding birds.

6.2.9 Broadleaf Semi-natural Woodland (JNCC Code : A1.1.1)

The area around the lake has been colonised by willow (*Salix cinerea*) forming an area of wet woodland extending to approximately 0.7ha. This is still relatively young in age but already provides excellent bird breeding habitat. This is made up predominantly of *Salix cinerea* and *Alnus glutinosa*. Gaps in the canopy reveal areas of dense bramble.

There is a small area of oak and sycamore semi-natural woodland (approx. 800 m²) to the south east of the hotel.

6.2.10 Conifer Plantation (JNCC Code : A1.2.2)

A small plantation of Sitka spruce has been established on the steep slope alongside the Afon Seiont. This contains a small number of beech, oak and ash. The woodland is grazed, with no woodland flora.

The site adjoins an area of woodland shown on the Cofnod records as Ancient Semi-natural Woodland. This is located alongside the Afon Seiont to the west of the Scheme boundary. Currently this comprises even aged Sitka spruce plantation with very limited ground vegetation. This would more accurately be described as a Plantation on an Ancient Woodland Site (PAWS).

There is a small group of Norway spruce and pine with beech along the south side of the driveway near to Llwyn y Brain.



6.2.11 Broadleaf Plantation (JNCC Code: A1.1.2)

Beech trees have been planted along the driveway from the Llanberis road and to the west of the manor house. These mature trees form an important landscape feature.

A mixed broadleaf plantation has been planted on the steep slope alongside the Afon Seiont. This covers approximately 0.2ha. It is approximately 20 years of age and contains oak, beech, ash and larch.

Currently it is grazed and has no woodland ground flora.

6.2.12 Stone Walls (JNCC Code : J2.3.5)

Most of the fields are bound by dry stone walls which are in good condition. See figure 2.

6.2.13 Buildings

Within the Scheme area is a 28-bed hotel with associated buildings. There are a group of redundant farm buildings located to the west of the hotel.

6.2.14 Hard Standing (JNCC Code: J4)

An area approximately 2500m² of asphalt car parking and roadway. This is of negligible ecological value and is not considered further within the ecology report.

6.3 Species

6.3.1 Breeding Bird and Overwintering Birds

The Extended Phase 1 survey was undertaken outside the breeding season. Snipe were recorded over the lake. A range of habitats suitable for nesting were identified.

A winter bird survey of Seiont Manor was undertaken during 2018. This found that the site is used by a flock of over wintering redwings (amber listed), feeding on the sheep grazed fields. The red listed Herring gull also feeds over the fields during the winter. The Bullfinch (red listed) were rarely seen. The remaining species are typical of the habitat on site.

A breeding bird survey of Seiont Manor undertaken in 2018 identified 31 species breeding on or near the site. Just one red list species, the starling, was seen nesting in Llewyn y Brain, as was the house sparrow. The remaining amber list species are typical of the habitat including the fishing pond and patches of broadleaved and conifer woodland.



Dippers were occasionally seen on the Afon Seiont, but no nests were present on the section bordering this site. Evidence of otters was also found on rocks on the edge of the Afon Seiont and also on the east side of the pond. Two large nests were found in the conifers in the north east field (possibly buzzard nests) but there was no evidence of occupation in 2018.

The bird assemblage reflects the variety of woodland, agricultural and riparian habitats which are present.

All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).

6.3.2 Otters

At the time of this survey (Feb 2021) otter spraint and footprints were found around eastern edge the pond area, but no holts were identified. It is likely that the pond is used as a food source and the wet woodland as a rest area for otters migrating through the Seiont valley. Otters were recorded in the Afon Seiont in 2018.

Further surveys are recommended to see if holts or resting places are present along the riverbank and elsewhere prior to the commencement of construction. If features are found to be present, additional mitigation measures may be required. If a holt is found, a protected species licence may be required before any works can proceed.

6.3.3 Bats

There is a known lesser horseshoe roost within the disused manor house Llewyn y Brain. Bat surveys were undertaken in 2007, 2013, 2017 and 2018. A small number of lesser horseshoe bats have been recorded overwintering in the cellar of the house throughout this period. Other bat species may also be present and there are local records for brown long-eared bats for the same location. Llewyn Y Brain is not within this current survey area. Static bat recorders were employed in 2018 and no bats were recorded in the hotel buildings.

There are several mature oak and ash trees with potential roost features. These are shown on the Phase 1 Plan. There are a series of disused farm buildings which are also suitable for roosts. They are currently in a very poor state of repair and unsafe for internal survey.

The Site has potential for foraging bats within the river corridor and around the lake area. The general landscape has many features which are attractive to a wide number of bat species. Bats at Seiont may form part of the larger lesser horseshoe population within the nearby Glynllifon Special Area of Conservation.

All species of bat in the UK receive full protection under Schedule 2 of the Conservation of Habitats and Species Regulations (2010) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

6.3.4 Reptiles

No reptiles were identified during the walkover survey. In the late spring of 2018, a range of locations were surveyed across the site including areas close to dry stone walls and woodland. The area close to the fishing pond provides suitable habitat for both reptiles and amphibians. The survey suggested reptiles (slow worms) are present here but in low numbers. Any development on the grassland south of the pond should take reptiles into consideration during any construction works.

All reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) against intentional killing or injuring.

6.3.5 Great Crested Newts

There are no close records for great crested newts (gcn) but there are known records within 10km. No suitable breeding ponds were identified within the Site or within 500m of the boundary.

gcn have been scoped out within the Site.

6.3.6 Badgers

No signs of badgers were observed within the Site in 2021. An extended walkover was completed in 2018 through the woodland to the west of the Site and along the river. The plantations along the river are all heavily grazed and have no shrub layer. No setts were identified; however, there are records for badgers nearby and the landscape provides a matrix of habitats that are beneficial to foraging badgers and their presence is likely from time to time.

Badgers and their setts are protected under the Protection of Badgers Act 1992 from injury/fatality, damage and any form of disturbance.

6.3.7 Scattered Trees (JNCC Code: J4)

There are a number of notable oak and beech trees across the site which form part of the landscape associated with Llewyn y Brain. Ash is more frequent in the wetter valley which runs northwards from the hotel building to the north west. These trees are likely to be infected with Ash Dieback disease and will need to be replaced over the next 3 – 5 years.

6.4 Target Notes

Target Note 1 Dry Riverbed

There is a clear former riverbed feature through a depression across this field running parallel to the Afon Seiont. The soil is very thin and large stones make this area difficult to graze. Ruderal species such as nettle are common. The total area of stony grassland is approximately 1000 m². This is an unusual feature but is only of site ecological value.

Target Note 2 Open woodland / grassland and wetland mosaic habitat.

There is an area alongside the hotel car park comprising mature oak and horse chestnut trees, a stream, wet grassland and dry grassland. Wood anemone, primrose, greater stitchwort and blue bell were recorded in the spring. The combined area of these habitats is approximately 850 m² and is of local importance.

Target Note 3 (off site) Ancient Semi natural Woodland.

Spruce plantation at Glan Seiont on adjacent farm. This woodland close to the river is designated as ancient semi-natural woodland. The plantation is heavily grazed and exhibits no apparent ASNW characteristics.

7 Likely Impacts

The proposed development includes the construction of 39 timber holiday cabins, access tracks, extensions to the existing hotel building, the construction of a staff accommodation building, car parking and two tennis courts.

An initial Draft Ecological Constraints Plan was issued to the design team following the walkover surveys in February 2021. Information from previous surveys was also made available. This information was used to inform the layout of the development and to avoid impacts to sensitive receptors wherever possible.

The Scheme has been designed to minimise impacts to mature trees, stone walls, semi-improved acid grassland and broadleaved woodland.

7.1 Designated Sites and impact avoidance

There are no likely impacts on statutory designated sites of nature conservation. There are no likely impacts to any non-statutory sites including the local wildlife site. The design layout has been modified to avoid impacts to the disused farm buildings, and to create a buffer between lodges and Glan Seiont woods. The proposed staff accommodation has been relocated away from the wet grassland and mature tree mosaic habitat near the hotel.

The proposed number of lodges has been reduced from 50 No. to 39 No. units and careful consideration has been given to their location and alignment. A 30 meters buffer area between the lodges and Glan Seiont woods has been maintained, a new corridor for the otter migration has been created in the eastern part of the site to connect the Seiont River to the existing large pond and the existing trees and woodland have been retained.

7.2 Habitats

It is likely that the construction of holiday lodges and the hotel extension will impact on the following habitats within the Site:

- Improved grassland: (existing fields for lodge construction) The total area used for siting lodges and access tracks will be 2.2 ha. Some of this will be converted to amenity grassland around the lodges and some will be planted with native trees and shrubs within the landscape scheme. Estimated area of hard surface and standing for the development will be 5000m² and a up to 4000 m² for the lodges. The resulting additional amenity grassland will be 1.3ha
- Amenity grassland: (area lost for car parking and tennis courts) Approx 1200 m² will be removed.
- The area of dry grassland in the old riverbed will be lost. This currently extends to 1200 m².

- Broadleaf Trees: A small number of ash and alder trees will need to be removed below the hotel building for the proposed main access route to the lodges. Approximately 12 trees will be lost. None of these are considered to be notable and ash trees are likely to already be infected with ash dieback disease.
- Part of the Open woodland / grassland and wetland mosaic habitat will be lost to the proposed staff accommodation building (approx 800m²)
- Up to two 4 metre long sections of dry-stone wall will have to be removed to create access. These could impact suitable habitat for reptiles.

7.3 Species

The removal of a small area of coniferous plantation woodland and broadleaf trees will likely impact on breeding birds. There is also the potential to impact upon foraging bats from the reduction in improved grassland and additional external lighting and noise.

- Birds may also be affected by additional noise and lighting close to the pond area.
- Otters could be affected by construction and operational impacts close to the pond and between the pond and the river.
- The area of habitat suitable for reptile species, including slow worm, will be reduced. Reptiles may be disturbed by construction works, particularly in the area close to the pond.
- Other: Construction may impact upon foraging badgers which are likely present in the surrounding landscape. Surveys prior to the commencement of construction are recommended, and suitable mitigation measures have been recommended in Section 8 as a precaution.
- Bats may be using the disused farm buildings below the hotel as a roost site (surveys to date have not been conclusive). These buildings are not affected by the development, so any potential roost site is not at risk. The location of lodges in the adjoining field to the north could adversely affect any bat migration route to and from the river and could reduce the available foraging area.

The Scheme will not affect any Designated Sites but may adversely impact protected species of national importance.



8 Further Survey Requirements

Bats

The old farm buildings below the hotel are in a poor state of repair and have not been surveyed for bats. The current proposals do not affect these buildings which are to be retained as a heritage and wildlife feature. Lodges will be constructed in the field immediately to the north. Due to proximity of the farm buildings to the lesser horseshoe bat roost at Llewyn y Brain, it is recommended that emergence bat surveys be undertaken during the spring/summer of 2021 to determine if bats are also roosting here. Remote bat detectors were deployed during the 2018 surveys, but no definitive activity could be attributed to the farm buildings at that time. A more focussed survey is currently recommended as a precautionary measure. If bats are using the buildings, further surveys may be required to determine how the buildings themselves can be preserved as well as protecting any roost features. A protected species licence would be required to undertake any safety works. Mitigation measures to reduce light disturbance and maintain migration routes are proposed. Additional mitigation and enhancement measure will also provide improved foraging areas. The bat surveys will determine whether any additional measures may be required.

Otters

Otters activity constantly changes. No holts or rest areas were identified in the 2021 survey, but they were present in the pond area. The status of otters at Seiont Manor should be checked again prior to the commencement of any development works. If a holt has been made, further mitigation measures may be required.

Badgers

Again badger activity can change rapidly over time. No badgers are currently present on site, but it is essential that all of the land is checked again prior to the commencement of construction. Further mitigation measures may be required if they are found to be present at that time.

9 Mitigation and Ecological Enhancement Measures

9.1 Mitigation Measures

The following mitigation measures have been proposed to minimise the potential ecological impacts during construction and redevelopment of the Site. Seiont Manor comprises a number of habitat features and the proposed development is extensive. While adverse impacts have been avoided as much as possible, a number of mitigation measures are required to protect notable features and to compensate for losses. In addition a range of measures have been proposed to further enhance the biodiversity of the site which are detailed in section 9.8.

9.1.1 Table 2: Ecological loss and gain summary table

Habitat / Species Type	Loss	Importance	Gain
Improved Grassland	30,200 m ²	Site	0
Acid grassland	0	Local	10,000m ²
Amenity Grassland	1200m ²	Site	12,600 m ²
Dry Riverbed	1200 m ²	Local	0
Open woodland / grassland and wetland mosaic habitat	800m ²	Local	800m ²
Native broadleaf plantation	0	Local	1400 m ²
Buildings / hard standing	0		9000 m ²
Habitat total	32800 m ²		32800 m ²

9.1.2 Dry-stone Wall

Any breaks in the drystone wall will be made under a watching brief with the Scheme ecologist. This will be detailed within the Landscape and Environmental Management plan (LEMP). The section of wall which is removed should be rebuilt perpendicular or curved away from the break to ensure that there is no net loss of dry-stone wall. The overall length will remain the same.



9.1.3 Trees and Woodland

The layout of the development has considered the retention of trees wherever possible. There will be no impacts to the beech woodland along the entrance driveway or the oak woodland near the hotel. The conifer and broadleaf plantations alongside the River Seiont will not be affected by the proposed Scheme. Retention of these woodlands is essential to maintain the unspoilt character of the river corridor which is a Local Wildlife Site.

Tree and vegetation clearance should be completed outside of the breeding bird season (March to September).

Individual parkland trees (oaks) within the open fields will be retained. These will be fully protected during the construction phase following the guidelines of BS5837 Trees in relation to design, demolition and construction- recommendations 2012. This will require the installation of suitable protection fencing beyond the root protection area of each of the trees shown on the Scheme layout. Protection fencing must conform to BS5837 and be in position prior to any construction work. Full details showing the location and specification for all the protection fencing will be provided within the Landscape and Environmental Management plan (LEMP). It is recommended that the protection fencing is extended to include the woodlands close to the river and the areas or riparian acid grassland.

A small number of semi mature amenity trees (birch and cider gum) will need to be removed between the hotel and the pond. These will be replaced with trees within and around the car park area which will be detailed within the Landscape and Environmental Management plan (LEMP). Downy birch and Grey Willow are recommended replacements. Drawings will be produced for the Plan and will show soil preparation, species, numbers, location, sizes, planting instructions and maintenance.

Lodges are to be constructed in the north west of the Site. The closest lodge will be 30 metres from the edge the spruce plantation which is within the adjoining ownership. The plantation is designated as ancient woodland (rather than as a plantation on an ancient woodland site). Current Standing Advice requires a minimum of 15 m between any development and an ancient woodland. The lodges will be separated from the woodland by an existing track and a stone wall. There is a gateway within the dry-stone wall, and it is recommended that this is removed and replaced with dry stone to match the existing wall. This will reduce trespass and disturbance to the nearby woodland. A detailed methodology will be prepared for the Landscape and Environmental Management plan (LEMP).

An area of native broadleaf woodland (approximately 1200 m²) will be planted along the eastern boundary of the site between the River Seiont and the pond. This is to provide a safe migration route for otters using the pond for feeding or resting up. Native species such be used including Sessile oak, downy birch, hazel, rowan and grey willow (*Salix cinerea*). A detailed specification and layout plan will be prepared for the LEMP. This new woodland will also create a habitat link between the existing wet woodland around the pond and the existing broadleaf plantation alongside the river. Linking and enlarging woodlands increases the range of species which they are able to support.



Trees will also be planted around the farm buildings below the hotel in order to create a dark commuting corridor for bats below Llwyn y Brain house. These trees will replace the ash and alder removed to facilitate access track construction. We also have allowed for the replacement of ash trees which are present in the hedges and are likely to succumb in the near future to ash dieback disease. Planting in this area will include common alder, sessile oak, downy birch, beech and rowan. A minimum of 50 trees will be required covering at least 200 square metres. Detailed drawings will be produced for the LEMP and will show the required soil preparation, species, numbers, location, sizes, planting instructions, protection and maintenance.

It is recommended that the LEMP should also contain a Tree Protection Plan following the guidelines of BS5837 Trees in relation to design, demolition and construction- recommendations 2012. Arboricultural method statements will be required to enable the notable trees to be retained around the proposed staff accommodation building. Construction close to the root protection area of retained trees may require construction methods to be modified.

9.2 Grassland and wetland mosaic habitat

An area of species rich grassland will be removed in order to construct a staff accommodation building. It is recommended that the turf from this area (approx 800 m²) is translocated to a suitable receptor site in order to conserve this habitat. The area at the base of the slope to the west of Llwyn y Brain should be considered as a receptor site. This is currently an area of improved grassland but with similar soil conditions to the donor site. The LEMP should provide details of how the turf from the donor site can be successfully translocated. An ecological method statement should include an assessment and preparation of a suitable receptor site. The timing and method of turf removal and transportation must also be shown along with long term management and monitoring considerations. All work should be undertaken under an ecological watching brief. For further details see CIRIA 2003 Habitat Translocation Guide Best Practice C600.

The LEMP will also need to detail protection of the stream which runs close to the proposed staff accommodation block. Suitable protection measures need to be in place to ensure that the stream does not become contaminated during grass translocation and the subsequent construction works.

Part of the grassland and wetland mosaic will be retained. The LEMP will need to show how these areas will be protected during the construction phase and how they will be maintained and integrated into the operational landscape around the staff accommodation building.

9.3 Acid Grassland

The north facing grass slopes close to the river will be maintained as hay meadow areas within the lodge complex. If cut late in the season, and all grass collected, a more diverse range of wildflowers will develop over time. A detailed methodology will be prepared for the LEMP.

9.4 Bats

External lighting for the lodges will be kept to a minimum and should be erected no higher than 2.5m from ground level. (Many external lights need be no more than 1.5m from ground level). All lights will be fitted with cowls to minimise light spillage to the side and to block all upward illumination. Lighting must be kept as low as possible and light levels should not exceed 3 Lux at ground level. External lighting fitted to lodges should be located irregularly in order to avoid creating linear illuminated areas and to minimise individually illuminated areas. Wherever possible lighting should be omitted altogether or should be movement activated or time restricted to reduce the period of use.

Particular care must be taken to minimise external lighting close to Llewyn y Brain and the main driveway. No lighting should be installed close to the river or the pond areas. This will apply to the car park area and the tennis courts. Court floodlighting will not be installed. The pond will be screened from the car park with shrub and tree planting. This needs to be sufficiently dense to stop car headlights illuminating the surface of the pond. Evergreen shrubs will need to form part of the planting mixture. A more detailed lighting plan will be prepared for the LEMP. This will identify all of the required dark areas. Details of light spill including the layout of lights within individual lodges which are located close to woodland areas.

The Scheme incorporates specific landscape constraints in order to retain uninterrupted views from Llewyn Y Brain, and to maintain the rugged landscape character of the Seiont river valley. Both of these measures will also maintain safe migration corridors for bats.

Measure to restore acid grasslands, a pond and new woodland areas will improve the quality of foraging habitat available for bats close to the Llewyn y Brain Roost. Areas of green roof will also provide additional high-quality foraging for bats. Bats will also benefit from measures to improve the management of existing broadleaf and conifer plantations.

9.5 Breeding and Overwintering Birds

Trees and woodland have the potential to support breeding birds. Any construction or clearance works impacting on these areas should be completed outside of the breeding bird season (March-September).

If this is not possible then the works will require an ecological brief to ensure that the structures are clear of nests. If any active nests are located, then works will be required to stop until a 5m radius around the nest has been screened off from construction. Any works within this area will only be permitted to continue after the chicks have fledged.

Mitigation for the loss of breeding bird habitat will be required within the landscaping plan through the inclusion of native trees and shrubs. In addition, bird boxes will be required while the replacement planting matures. Each of the new lodges will be fitted with a bird box. A range of designs should be



fitted to attract a variety of species. These should include, open fronted boxes, small nest boxes with holes, and a small number of larger nest boxes with holes for woodpeckers or starlings. Boxes should be fitted in suitable positions on each lodge under the supervision of a suitably qualified ecologist. These must be further detailed within the Landscape and Environmental Management plan (LEMP).

Measures to screen the pond area (see 9.6) will also reduce disturbance for overwintering birds within the area of wet woodland.

New areas of Acid Grassland, Green Roof, Ponds and Woodland as well as restored ponds and plantations will all combine to improve foraging and nesting opportunities for birds.

9.6 Reptiles

Slow worms are present in small numbers in the grassland area next to the pond. The following mitigation measures will need to be observed prior to the commencement of works:

Any long vegetation will be trimmed down to 10 cm in height to discourage repopulation. Following a minimum of 24 hrs from strimming, a destructive search will be undertaken, involving scraping up of the turf and first few centimetres of soil surface, with an ecologist present to rescue any individual reptiles found. This would be undertaken in weather suitable for reptiles to be active (warm and dry with little wind).

Capture and Release.

Animals will be captured by appropriately trained and experienced personnel and species held in appropriate containers and transported immediately to a release site which will be created along the south eastern edge of the pond between the wet woodland and the perimeter stone wall. This covers an area of approximately 250 m². An appropriate container will comprise good ventilation, a secure lid and plenty of dry bulky vegetation such as hay. Best practice methods will be used as outlined in the Herpetofauna Workers' Manual (JNCC, 2003)¹.

Receptor Site

The receptor site will be protected from the construction work by exclusion fencing. The site must first be partially cleared of brambles (approximately 50% by area.) A series of 4 log piles will be made using willow cut from the adjoining wet woodland, which will be allowed to re-coppice. Surveys will be undertaken at the proposed receptor site prior to translocation to ensure a current low level of reptile population. The receptor site would be monitored every five years to ensure continuing suitable conditions.

Timing of Works

Capture and release can only take place while reptiles are active between April and early October. Trapping is unlikely to be successful in hot weather when average temperatures exceed 20C. Further details of the reptile methodology should be prepared for the LEMP.

9.7 Otters

Otters are a European Protected Species. They are likely to be present at Seiont on an occasional basis, mainly at night along the river and the pond. Steps will be taken to minimise construction disturbance close to these areas. External lighting will be omitted from these areas. The eastern and western ends of the pond will be left as non-intervention areas to minimise chances of disturbance.

It is recommended that a 2m tall temporary panel wall be erected across the south side of the pond while the car park and tennis courts are under construction. This will reduce the visual and noise disturbance to the pond. Tree and shrub planting will screen the pond from the car park on completion. A detailed design for the location and specification of the fence should be prepared for the LEMP.

No otter holts or resting places were identified during surveys in 2021, but checks should be undertaken prior to the commencement of construction. If holts are present, additional mitigation measures may be required, including the possibility of a European Protected Species Licence.

9.8 Badgers

No badgers have been found to be present, but contractors should be made aware of the possible presence of badgers both within and adjacent to the Site. As a precaution, the Site should be kept clean and tidy overnight to discourage badgers from trying to enter construction zones. Food should be kept locked away. If ditches are left open overnight, a piece of scaffold board should be angled within the ditch so that animals can escape and do not get trapped if they fall in.

Table 3: Mitigation Summary Table

Species/Habitat	Impact	Mitigation Measures
Bats	Disturbance	Lighting restriction around car park and lodges.
	Migration routes	Additional tree planting along routes to and from the Afon Seiont and around Llewyn y Brain
	Foraging areas	Creation of additional areas of semi-improved acid grassland and acid grassland, pond and wetland area
Otters	Disturbance	Construction screening provision from car park. Planting of 1200 m ² woodland migration route from the river to the pond.
	Disturbance	Further surveys required prior to construction commencement
Reptiles	Disturbance	Capture and translocation required and exclusion from construction area for car park and tennis courts. Watching brief where stone walls are breached,

	Habitat loss	Habitat improvement required at NE corner of pond area.
Breeding Birds	Habitat Loss	Planting of new areas of broadleaf woodland
	Habitat Loss	Provision of nesting boxes as temporary mitigation until planting matures.
Grassland / wetland mosaic	Habitat translocation	Requirement to ensure that translocation is successful and new habitat area is well managed.
Improved grassland	Habitat Loss	Replacement with acid grassland

9.9 Ecological Enhancement

Recommendations will be made to further enhance the ecological value of the Site in line with the current National Planning Policy Framework. Recommendations aim to compliment and extend existing habitats. Detail of all the enhancement measures will be provided within the LEMP.

The field along the western boundary (due west of Llewyn y Brain is currently improved grassland with a single group of mature sycamore trees. We intend to restore as much of the field as possible as acid grassland which is the likely habitat on this site prior to agricultural improvement. This will improve the quality of the available foraging area for bats.

It is recommended that the slope is scarified and then covered with hay from a suitable acid grassland donor site. Steps should be taken through North Wales Wildlife Trust to identify a suitable source for herb rich hay. If this is not available, a suitable acid grassland seed mixture should be used such as that produced by the Grass Seed Store (<https://www.thegrassseedstore.co.uk/product/acidic-soil-wildflower-meadow/>) but this will require additional cultivation and management. On-going management of the grassland must be considered within the Site Nature Conservation Plan but will require selective grazing for short periods and regular hay cropping as late in the summer as possible. The area of grassland suitable for restoration is approximately 1 hectare. A detailed methodology for the grassland preparation and management should be prepared for the LEMP.

The following enhancement measures will be incorporated into the detailed scheme:

- Ten of the new lodges will be fitted with a single bat box.
- 39 of the new lodges will be fitted with bird boxes. This is more than the likely requirement for temporary mitigation for the loss of nesting habitat.

- Additional broadleaf tree planting along the western boundary below Llewyn y Brain (approx 2000 m²) These trees will be in addition to those planted for mitigation requirements and should include species such as sessile oak, beech, alder and sycamore. This will link to the existing landscape feature of mature sycamore trees, thus creating a much larger woodland area close to known bat roots.
- Restoration of broadleaf woodland alongside the Seiont River (Silvicultural thinning and native shrub planting) 1600 m². The plantation woodlands on the north facing slope by the river have been neglected for many years and have been subject to cattle grazing. This has led to the removal of any shrub or ground flora. Thinning out sub dominant trees will increase light levels and enable shrubs and trees to regenerate.
- Improve habitat value of Conifer Woodland alongside the Seiont River through silvicultural thinning (as above) total area 1600 m².
- Installation of Blue / Green Roof to Hotel Extension (Kitchen and Dining areas). The new sections within the hotel complex will have green rooves which will create new habitat for invertebrates. These in turn will help support bird and bat species.
- Restoration of ponds near the lodge and re-creation of pond and wetland below hotel.
- Additional gain of 10,000 m² of acid grassland.

Pond Restoration (Entrance Lodge location) and New Pond Creation

Trees need to be pruned back from the small pond just to the south of the lodge entrance in order to restore access and to increase the amount of light reaching the water. It is likely that the pond will require dredging to remove silt and accumulated leaf litter. Surrounding beech trees will require lateral pruning and slight crown raising. A detailed methodology should be prepared for the LEMP.

A new pond will be created in the valley bottom below Llewyn y Brain near the disused farm buildings. Details for the pond design should be included within the LEMP but will be dependent of the detailed design for the new access track to the lodges. Ground investigation will be required. This appears to be on the site of a previous farm pond which has silted up over the years. Excavation of the silt may be sufficient for its restoration, but suitable marginal vegetation could be translocated from around the main pond.

It is possible that additional surface water attenuation will be required for the new car parking area and tennis courts to the north east of the hotel. There is sufficient room to create an additional pond between the old farm buildings and the hotel or to create an additional wetland area alongside the new pond.



Ponds and wetland habitat this close to the Llewyn Y Brain roost will provide important additional habitat.

Also, a blue green roof has also been incorporated in the design of the spa and hotel extension. In addition to diminishing the built impact of the proposal, the blue green roof will assist in the storing and managing of rainwater, integrate the building with the surrounding natural environment and help the wildlife diversity.

9.10 Landscape and Environmental Management Plan (LEMP).

Due to the number of ecological receptors, and the wide range of mitigation requirements, it is recommended that a Site Landscape and Environmental Management plan (LEMP) is drawn up for the Scheme. This should provide details on the following:

- Roles and Responsibilities for implementation, supervision and monitoring.
- Assimilation and analysis of on-going data collection
- Monitoring and reporting arrangements (including statutory and non-statutory requirements)
- Revised mitigation details with respect of more recent survey data
- Detailed mitigation and enhancement methodologies (as indicated)
- Ecological clerk of works provision
- Licence requirements, liabilities and responsibilities.
- Full method statements and site plans for species and habitat protection, species mitigation measures, grassland translocation, tree protection, habitat creation and landscape planting
- Detailed landscape plans for tree planting and landscape enhancement areas including car park, tennis courts, lodge area and staff accommodation block.
- Detailed specification for Blue / Green Roof construction and maintenance.
- Maintenance schedules for both establishment and operational periods.
- Monitoring programme, assessment of mitigation measures and requirement for modification or additional works.
- Details for informing Gwynedd Council of any requirement for modifications or additional measures in response to monitoring results.



10 Ecological Report Limitations

The information reported herein is based only on the interpretation of data collected during the desk study investigations and the site visit. This work pertains specifically to the identification of protected species on the proposed site. Information provided to Land and Heritage by Cafod, and other statutory information sources has been accepted as being accurate and valid.

The evaluation and conclusions do not preclude the existence of protected species, which could not reasonably have been revealed by the comprehensive desk studies and site visits. Hence, this report should be used for information purposes only and should not be construed as a comprehensive characterisation of all site habitats.

In addition, this report details only the conditions on site, at the time of reporting. The dynamic nature of the natural environment will result in changes to the surrounding environment as seasons change. No responsibility is taken by Land and Heritage Ltd to the existence of additional species identified on this site at a later date.

This report has been prepared solely for the use of Caernarfon Properties Ltd and may not be relied upon by other parties without written consent from Land and Heritage. In addition, it must be understood that this report does not constitute legal advice.



11 References

Cofnod Report ref E06322 12/02/2018

Institute of Environmental Assessment. 1995. Guidelines for Baseline Ecological Assessment. London: E & FN Spon.

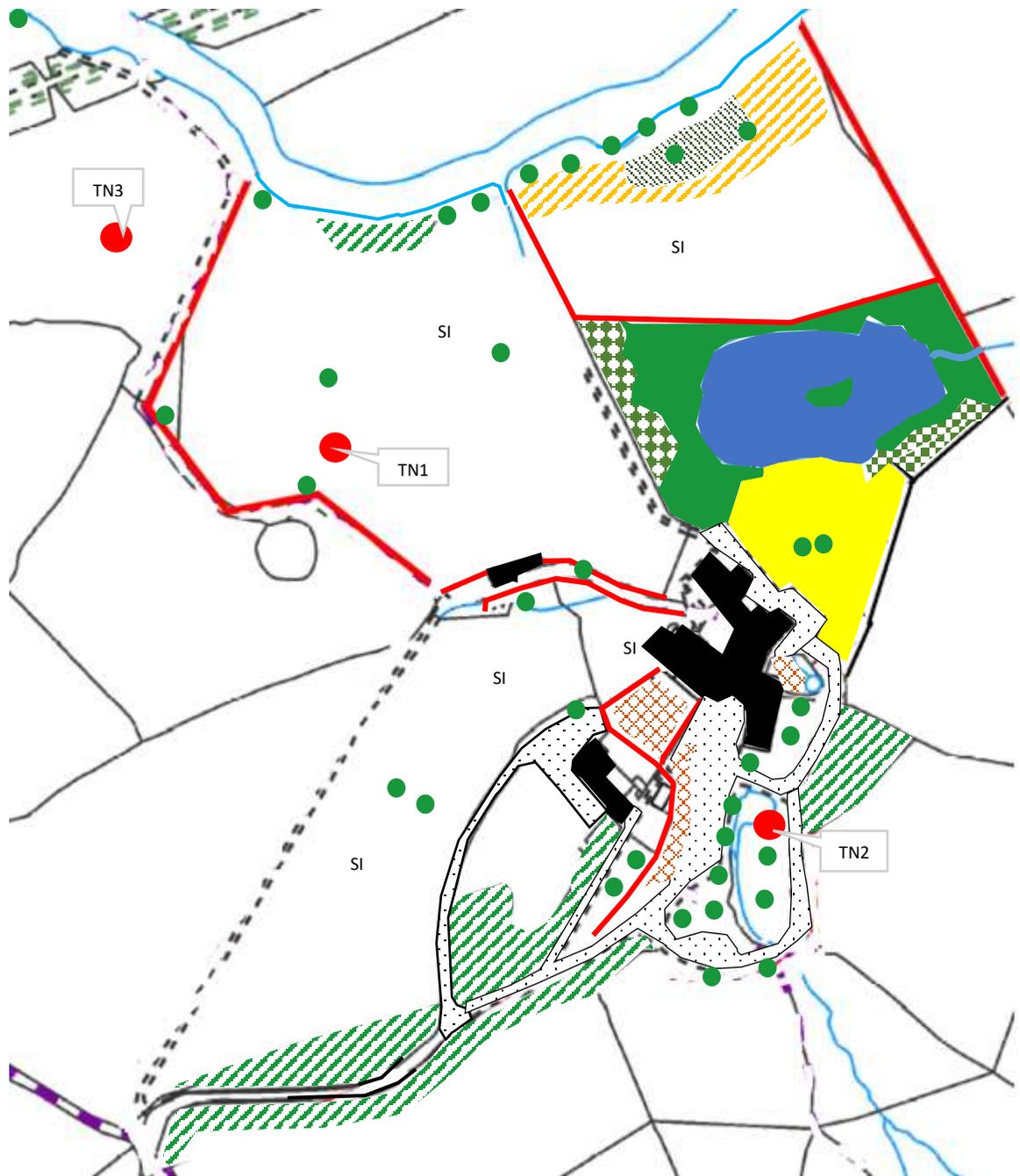
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APPENDIX ONE

EXTENDED PHASE 1 HABITAT PLAN



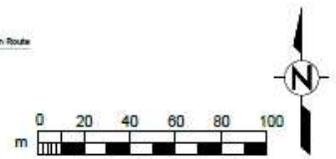
-  Woodland Broadleaved semi natural
-  Scrub Dense continuous
-  Woodland BL plantation
-  Amenity Grassland
-  Semi improved acid grassland
-  Semi improved grassland
-  Standing Water
-  Broad leaved tree
-  Target Note
-  Dry stone wall
-  Road & hard surface
-  Conifer plantation
-  Introduced Shrub



APPENDIX TWO

PROPOSED DEVELOPMENT PLANS

Drawing No: 2019-001
 Date: 07/04/21
 Project: Selont Manor Hotel Extension & Remodelling
 Location: Selont Manor, Selont, Devon
 Scale: 1:1000
 Drawing: P-03



Masterplan Schedule:

- Selont Manor Hotel Extension & Remodelling:
 1. Leisure (Including Spa)
 2. Lounge Bar & Restaurant with Terraces (450 sq.m)
 3. 28 No. Existing Bedrooms (32 sq.m)
29 No. Additional Bedrooms (28-35 sq.m) - 2 Floors
04 No. Additional Bedrooms (28-35 sq.m)
61 No. Bedrooms Total (Inc. Family & DDA rooms)

- Zones 1-3: Lodges
39 No. 3 Bedroom Lodges
with 2 parking spaces per unit

-

- Zone 4: Tennis Courts
2 No. Tennis Courts
Landscaped Path and Amenities Area
Car Park

- Staff Accommodation:
11 No. New Bedrooms (180 sq.m)
with staff car parking

- Outdoor Activity Zone (2,550 sq.m)
Activities buildings including lodge reception, activity centre
and small grocery shop

- Lwlyn Y Brain
Existing House Remodeled and Refurbished
(Subject to a Separate Planning Application)

- Helicopter Landing. Exact location TBC

- Access Links

- Biomass Plant Room

- Proposal Boundary Line

- Property Alliance Group Ownership Boundary Line

- Services Easement

DRAFT

Rev	Client	Project	Drawing
1	PROPERTY ALLIANCE GROUP	SELONT MANOR HOTEL EXTENSION & REMODELLING	PROPOSAL BOUNDARY LINE
2	PROPERTY ALLIANCE GROUP	SELONT MANOR HOTEL EXTENSION & REMODELLING	PROPOSAL BOUNDARY LINE

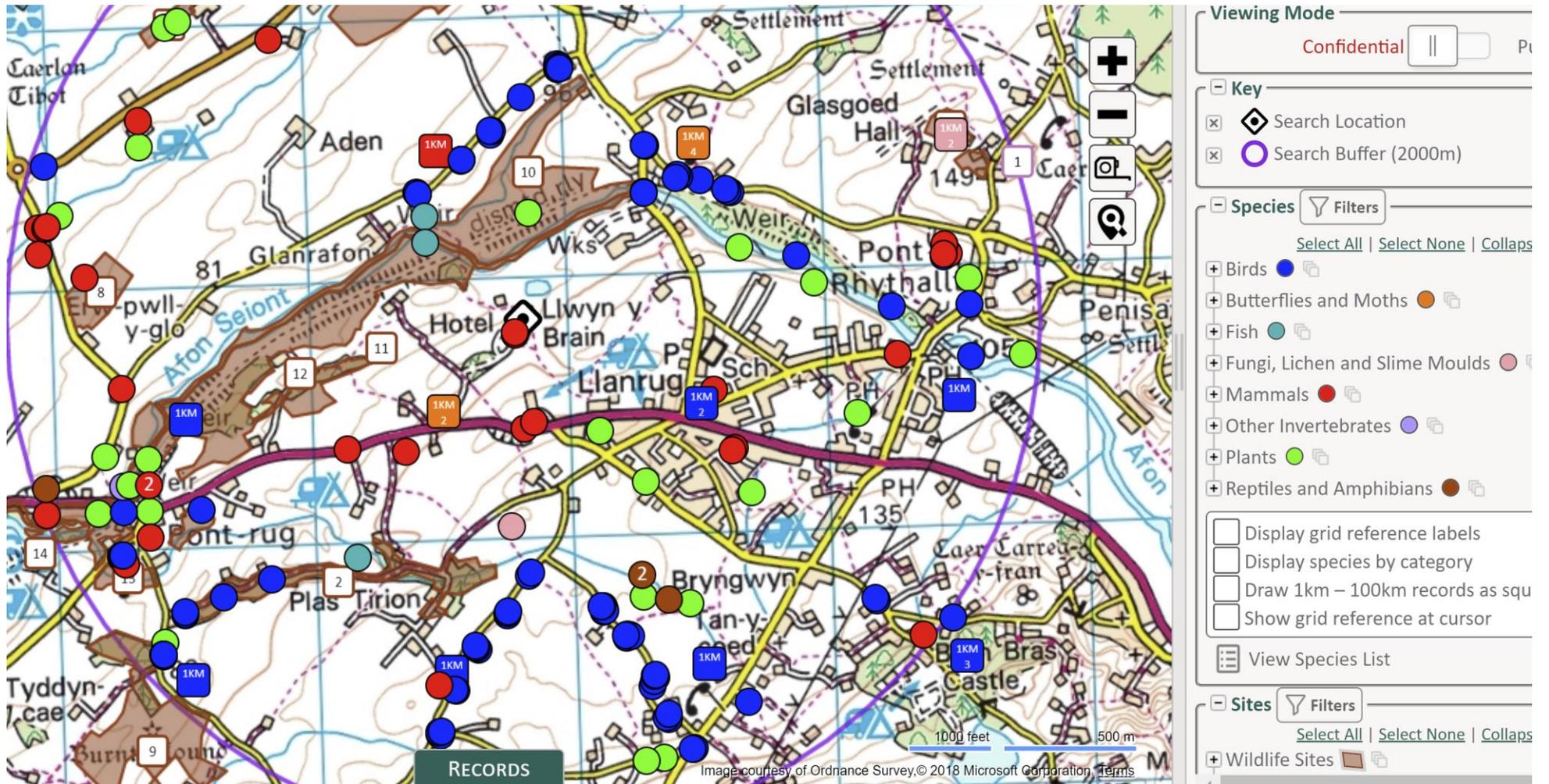
Project No	Drawing No	Revision	Drawn	Checked	Date	Scale @ A1
7381	P-03	-			07/04/21	1:1000



APPENDIX THREE

BIOLOGICAL RECORDS (SUMMARY ONLY)

Example of Cofnod Records for Site





APPENDIX FOUR

PREVIOUS BAT REPORTS, OVERWINTERING AND BREEDING BIRD REPORT, REPTILE SURVEY REPORT.



Alison Johnston
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**Updated Bat Survey Report
Of The old Manor house at Seiont Manor Hotel, Llanrug,
Gwynedd**



Undertaken by Alison Johnston

February 2013

1. Introduction

- 1.1 I have been requested to carry out an updated bat survey of the old manor house at Seiont Manor Hotel to support the renewal of the planning application that is due to expire on the 21st February 2013. The Original survey was undertaken in October 2007. This survey should be viewed alongside the original report dated October 2007.
- 1.2 The old manor house which is known as Llwyn y Brain is a Georgian manor house and is located adjacent to the Seiont Manor Hotel. The house is surrounded by 150 acres of mature farmland, which includes the Afon Seiont, gardens, hedgerows and many mature trees. .
- 1.3 All bat species are protected under the Wildlife and Countryside Act 1981 as amended by the CRoW Act 2000 and Conservation (Natural Habitats, &c.) Regulations 1994 which states that it is illegal for anyone without a licence to intentionally or recklessly kill, injure, capture or handle a bat of any species in Britain; to disturb a bat when roosting; or to damage, destroy or obstruct access to any place that bats use for shelter, whether bats are present or not.

2. Methods

- 2.1 Daylight inspection
Both the interior and exterior of the building where possible were thoroughly inspected for bats or any indications of the presence of bats. Such as scratch marks, lack of cobwebs, droppings or oil staining from bat's fur, audible squeaking and the presence of moth wings (indicates bat feeding perch). All crevices were inspected, so far as possible.
- 2.2 Dusk emergence survey
No dusk survey was undertaken at the time of this updated survey, due to the time of year as the bats would be hibernating.

3. Results

3.1 Daylight inspection - 12th February 2013

During the survey bat droppings were found in nearly all rooms along with butterfly wings, which can indicate bats feeding. The droppings were mostly old with some fresh droppings. The majority of the droppings were from lesser horseshoe bats (*Rhinolophus hipposideros*) and possibly also from brown long eared (*Plecotus auritus*) and pipistrelle bats (*Pipistrellus spp.*).

Two lesser horseshoe bats were observed hibernating in the cellar.

4. Proposed building works

- 4.1 I understand that the building is to be converted into additional hotel accommodation and conference facilities.

5. Assessment

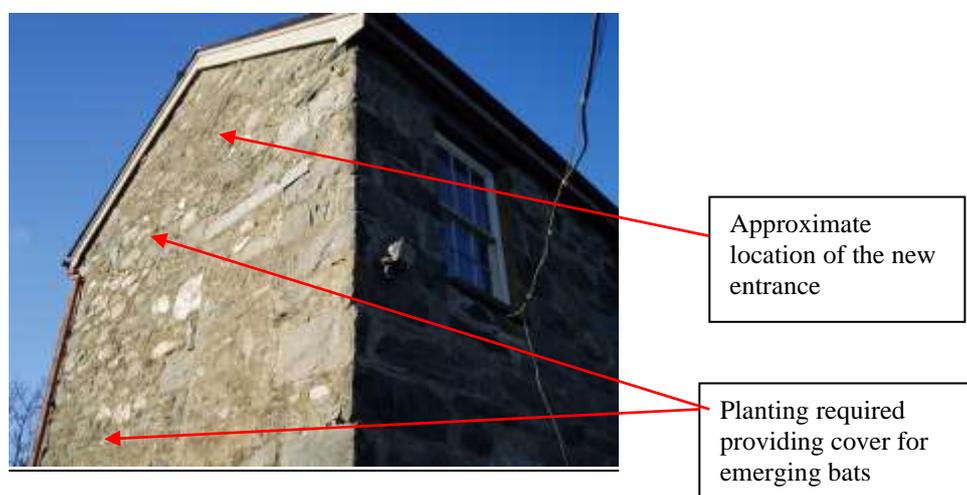
- 5.1 The droppings indicate that lesser horseshoe bats and possible brown long eared and pipistrelle bats are still using the building as a roost.
- 5.2 The condition of the building since the previous survey has deteriorated in particular there is a missing pane of glass at the top of the stairs, which would provide the bats with an additional access point which is evident by the presence of fresh droppings in this area. But this has also allowed weather ingress.
- 5.3 One of the windows into the cellar is now open, which has resulted in the cellar becoming less suitable for the bats to hibernate in. There is no fresh bat droppings in the area of the cellar that had previously been well used for a number of years and the two bats were roosting in another section.
- 5.4 There were two rooms which were locked that I was unable to gain access to. In addition not all areas of the roof voids were inspected, due to the condition on the timbers.

6. Conclusions and Recommendations

- 6.1 As the building was identified as a bat roost in the previous survey, it is still classified as a bat roost and there is evidence that bats are still using the building. As stated in the previous report you will require a licence from the Welsh Assembly Government before any work can be undertaken on the building. As part of the licence application you will need to provide mitigation for the loss of/disturbance to the roost.
- 6.2 The mitigation proposed in the report dated 2007 is still suitable as the plans for the building have not changed.
- 6.3 It is recommended that the roof space is to left solely as a bat roost. Lesser horseshoe bats are a species that require a sufficiently large space, unobstructed by timbers to fly in and light sample before exiting the roost. To facilitate this requirement a hole measuring at least 600mm x 600mm should be made in each of the internal walls within the roof space. This will allow all the roof voids of the building to interconnect. As the bats will no longer be able to fly within the building to move from one roosting area to another, they will then be able to do so within the roof void.

- 6.4 The access point will be a small opening in the south east gable end wall. This hole will need a cowl on it to prevent weather and bird ingress. There will need to be additional planting at the gable end to provide the bats cover while exiting the roost also planting to the south to provide a flight line. The planting at the gable end will have to be to a high level, possibly a climber on the gable wall, although the entrance must remain clear so there is no hindrance to the bats exiting the roost. There will be an additional access point in the north east gable end that will allow access into the vegetation.
- 6.5 Light spill will need to be prevented from the balcony on the south side of the building into the exit area of the bats, possibly by installing a screen at that end of the balcony.

Photograph 1. Showing south east gable end and approximate location of new entrance



- 6.6 An inspection hatch will need to be provided into each of the roof areas, to periodically allow for droppings to be removed and inspections.
- 6.7 The insulation that is to be used in the roof, it must be placed on the ceiling, so that the roof voids remain a cold roof system. In addition the depth of the insulation on the ceiling should not infringe of the height left for the bat roost. Adequate sound proofing must also be provided to prevent disturbance to either the bats or people residing in the dwelling.
- 6.8 Additional roosting opportunities for other species of bats should be provided by leaving 15 – 20mm gaps periodically between soffits and the walls of the building. In addition three Schwegler 1FD bat boxes should be hung on a nearby trees, again away from any external lights.
- 6.9 The hibernation site in the cellar will be retained with access provided via the coal chute. The entrance to the site must be protected from predators but have some vegetation cover that will provide cover for the bats. This vegetation should link into other vegetation to provide flight paths.
- 6.10 Work on the building will need to be timed so that it does not disturb the bats. The safest periods to undertake the work is between March and May and then

again between September and October/November, depending on weather conditions, as at other times of the year the bats will be hibernating or possibly using the site as a maternity roost. As part of the method statement for the WAG licence you will be required to have a licenced bat worker on site during these works to deal with any bats that are found.

- 6.11 If the bats are not roosting in the roof space over the winter, work should start on the roof spaces to make them suitable for the bats when they awaken from hibernation, usually around Easter depending on weather conditions when the bats will start to use them again. The cellar area of the building should not be disturbed during building works, as this is where the bats may be hibernating. Contractors working on the site must be prevented from entering this area of the building during the winter months and noise must be kept to a minimum during this time. Prior to any works starting on the roof space, they should be checked by a licenced bat worker
- 6.12 Pipistrelle bats are roosting under slates at the south west side of the building. As the roof is not due to be touched, they will be able to continue to roost here. However additional roosting opportunities could be provided by making gaps of approximately 15mm by at least 20mm long, and some larger will be left between the soffit and wall, on wall tops behind soffits.
- 6.13 Timber Treatment
Chemicals used for the treatment of timber can be lethal to bats. However, there are compounds that can be used that are relatively harmless to bats, usually synthetic pyrethroids. These chemicals do still have some toxicity to bats and it is important that any timber treatment should take place at a time when no bats are present. It is essential that only chemicals approved (by The Countryside Council for Wales) for use in a bat roost be used in the treatment of any timbers within the roofs on this site. If timber treatment is required a survey should be carried out immediately prior to the treatment date in order to ensure, as far as possible that no bats are present. The key hibernation periods should be avoided e.g. January and February. An up to date list of suitable chemicals can be obtained from The Countryside Council for Wales.
- 6.13 Contractors working onsite must be made aware that there is always a possibility that bats may be present within the building, at the top of the gable wall, under slates, at gaps between lintels over doors and windows, within timbers or at the eaves. Work should stop and a licensed bat worker or the Countryside Council for Wales (CCW) should be informed immediately if any bats are found or if the presence of bats is suspected. All bat species are protected under the Wildlife and Countryside Act 1981 as amended by the CRow Act 2000 and Conservation (Natural Habitats, &c.) Regulations 1994.

Alison Johnston
13th February 2013

CCW Licence No. 35113:OTH:CSAB:2011

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Photograph 2. Fresh droppings on floor of room with circular hole in window



Photograph 3. Fresh droppings in doorway at top of stairs



Photograph 4. Old droppings



Photograph 5. Gap at window into cellar



Photograph 6. Mostly old droppings in roof space



Photograph 7. Old droppings in roof void



Seiont Manor Ecological Surveys 2018

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1 Introduction

Cartmel Ecology Ltd. was instructed to undertake bird and reptile surveys on land adjacent to and including Seiont Manor (Figure 1). The results of surveys are presented here.

Sarah Cartmel who has been an ecological surveyor for over 25 years carried out the surveys, with some assistance from Alison Johnston.

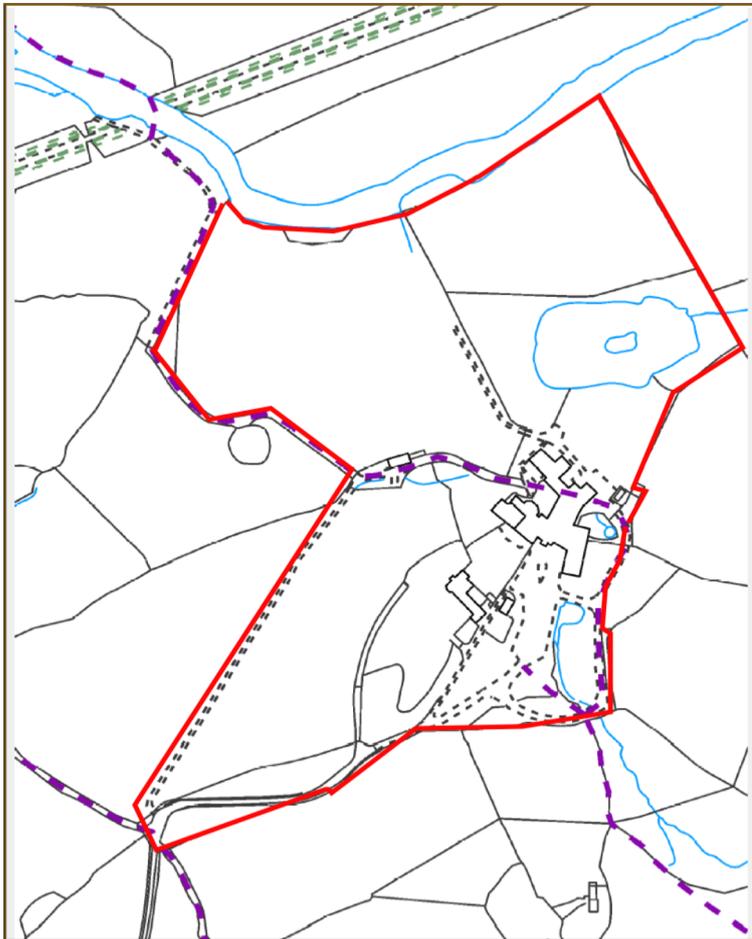


Figure 1 Area surveyed is within the red line

2 Bird Surveys

2.1 Methods

A winter and breeding bird survey was undertaken based on the methodology in Gilbert et al. 1998 Bird Monitoring Methods RSPB.

A walkover survey of the site was carried out covering all parts of the site within the site boundary. All birds were recorded within and adjacent to the site boundary with notes on their activity.

One visit a month took place over the winter period (December 2017 to March 2018) and two breeding bird surveys were carried out, one in April and one in May 2018.

Surveys were carried out by Sarah Cartmel.

2.2 Limitations

Surveys were undertaken in good weather apart from the first survey in December when a thick mist came down half way through the survey. However, it was still possible to hear birds and see those close by and the survey result is considered to be unaffected.

2.3 Habitat

The habitat on site predominantly consists of sheep grazed fields which surround Seiont Manor and its grounds. The Afon Seiont runs along the north boundary of the site and there is a small fishing pond immediately north of the hotel.

There is a small patch of conifers in the north east field and a conifer woodland bordering the north west side of the site.

There is wet woodland surrounding the fishing pond on three sides and amenity grass to the south. There are also patches of broad leaved woodland on the edges of the hotel drive and to the south and east of the hotel.

2.4 Results

Survey dates, times and weather conditions are given in Table 1, results in Tables 2 and 3.

A total of 37 species were seen on the site over the winter. This includes bullfinch and herring gull which are on the red data list by RSPB (Wales 2016). This also includes nine species on the amber data list: Coot, Dipper, Goldcrest, Mallard, Meadow pipit, mistle thrush, redwing, song thrush and teal.

A total of 31 species were seen on the site during the breeding season. This includes starling which is on the red data list by RSPB (Wales 2016). This also includes seven species on the amber data list: Dipper, grey wagtail, long-tailed tit, mallard, mistle thrush and song thrush.

Table 1 Winer and Breeding bird survey times and weather conditions

Date	Start time	End time	Temp	Cloud cover	Wind	Dry/rain
22/12/17	08:50	10:35	7°C	No cloud	No wind	Dry/misty
22/01/18	09:30	11:25	8°C	80%	W1	Dry
26/02/18	09:15	11:00	1°C	10%	E2	Dry
29/03/18	10:15	12:00	7°C	50%	SE2	Dry
20/04/18	08:30	10:25	12°C	No cloud	No wind	Dry
17/05/18	08:30	10:30	11°C	50% cloud	NE1	Dry

2.5 Conclusions

The winter bird survey of Seiont Manor found that the site is used by a flock of overwintering redwings (amber listed), feeding on the sheep grazed fields. The red listed Herring gull also feeds over the fields during the winter. The Bullfinch (red listed) were rarely seen. The remaining species are typical of the habitat on site.

The breeding bird survey of Seiont Manor in 2018 identified 31 species breeding on or near the site. Just one red list species, the starling, was seen nesting in the old manor house, as was the house sparrow. The remaining amber list species are typical of the habitat including the fishing pond and patches of broadleaved and conifer woodland.

Dippers were occasionally seen on the Afon Seiont but no nests were present on the section bordering this site.

Evidence of otters was also found on rocks on the edge of the Afon Seiont and also on the east side of the pond.

There are two large nests in the conifers in the north east field (possibly buzzard nests) but there was no evidence of occupation in 2018.

Table 2 Species recorded on each winter bird survey and number of birds observed

Species	22/12/17	22/1/18	26/2/18	29/3/18
Blackbird	5	5	15	6
Blue tit	5	12	9	5
Bullfinch**	2	1	0	0
Buzzard	1	1	2	2
Carrion Crow	0	2	0	0
Chaffinch	3	5	6	1
Chiffchaff	0	0	0	1
Coal tit	0	0	1	0
Coot*	1	0	0	0
Dipper *	0	1	0	0
Gold crest*	0	1	2	1
Goldfinch	0	0	5	1
Great Spotted Woodpecker	0	2	0	1
Great tit	3	5	3	6
Hedge Sparrow	0	0	2	0
Herring Gull**	14	30	0	3
Jackdaw	10	12	11	10
Jay	0	2	3	0
Long tailed tit*	0	0	6	0
Mallard*	8	5	8	2
Magpie	1	1	0	1
Meadow pipit*	0	0	10	0
Moorhen	0	0	1	1
Mistle thrush*	1	2	3	1
Nuthatch	0	0	0	1
Pheasant	0	0	1	0
Pied wagtail	0	0	0	2
Raven	2	2	0	1
Redwing*	32	30	20	0
Robin	4	3	12	5
Siskin	0	0	3	0
Song thrush*	0	0	2	0
Sparrowhawk	0	0	1	0
Teal*	0	2	4	0
Tree creeper	0	1	0	1
Wren	1	1	0	3

**Red list Wales, *Amber list Wales

Table 3 Species recorded on each breeding bird survey and number of pairs observed

Species	20/4/18	17/5/18
Blackbird	3	4
Blackcap	3	3
Blue tit	4	5
Buzzard	1	2
Carrion Crow	1	0
Chaffinch	2	4
Chiffchaff	2	4
Dipper *	1	1
Goldfinch	3	2
Great Spotted Woodpecker	2	0
Great tit	3	1
Grey wagtail*	0	1
House Sparrow	0	1
Jackdaw	6	8
Jay	2	2
Little Grebe	1	0
Long tailed tit*	1	0
Mallard*	0	1
Nuthatch	1	0
Pied Wagtail	2	1
Raven	1	0
Robin	3	4
Song thrush*	2	2
Sparrowhawk	1	0
Starling**	0	1
Wheatear	0	2
Wren	4	6

**Red list Wales, *Amber list Wales

2.6 Recommendations

Any site work that could impact nesting birds will take place outside of the bird breeding season (1st March to end July) as far as possible. If works must commence during the bird breeding season, the area proposed for clearance will be checked for any evidence/signs of nesting birds by a qualified, experienced ecologist prior to any works commencing. All birds and their nests are protected under the Wildlife And Countryside Act 1981 (as amended) and those listed under Schedule 1 of those regulations are also afforded additional protection.

3 Reptiles

3.1 Introduction

The adder, common lizard, grass snake and slow worm are protected against intentional killing or injuring under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). The sand lizard and smooth snake are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats and Species Regulations 2010 making them European Protected Species.

3.2 Methods

Reptiles cannot generate body heat internally, but rely on external warmth to raise their body temperature to optimal operating levels. To raise their body temperature they will bask in open direct sunlight or in warm sites under cover such as under vegetation or under objects lying on the ground or partially exposed amidst dense vegetation. For most of their active period reptiles require open, sunny habitats with low vegetation cover, where sunlight reaches ground level. They will favour south facing slopes and a mosaic of open, sunny areas and dense cover.

Survey methods are based on guidance in Edgar et al. 2010 and English Nature 2004 and Froglife (1999).

A walkover of the site was undertaken to identify areas where artificial refugia could be placed. Suitable reptile habitat to note included field edges close to drystone walls, woodland edge with grass (especially south facing or sunny situation), boggy areas and loose rock piles or stone walls adjacent to bramble or grass.

30 squares of bitumastic flat and corrugated roofing felt (1 x 1 m) were placed in areas of potentially suitable habitat in sunny positions on the 20th April 2018.

These were checked on seven occasions in May and early June 2018 on days of suitable weather conditions (not too hot or cold, between 9 and 20°C, dry). Surveys were carried out by Sarah Cartmel and Alison Johnston.

Sunny banks, stone walls and woodland edge close to refugia were also searched for basking reptiles.

3.3 Limitations

Sheep were present on the fields for the first couple of weeks while the reptile tiles were installed but there was no indication of disturbance of the tiles by the sheep. One tile was moved by someone and was not bedded in as well as others.

3.4 Results

In total 30 reptile tiles were set out on the 20th April 2018 and allowed to 'bed in' for two weeks before seven visits were carried out to look for reptiles either on, under or near the reptile tiles. Any reptiles (or amphibians) seen were identified by species and the number present at each tile location (Figure 2 and Table 4 and 5).

Only one reptile was found during the seven surveys - a male slowworm under a tile close to the pond, on the 16th May 2018. On the same survey a juvenile smooth newt was found under a tile close to a wall to the north west of the pond.

Toads were found under several tiles on most surveys.

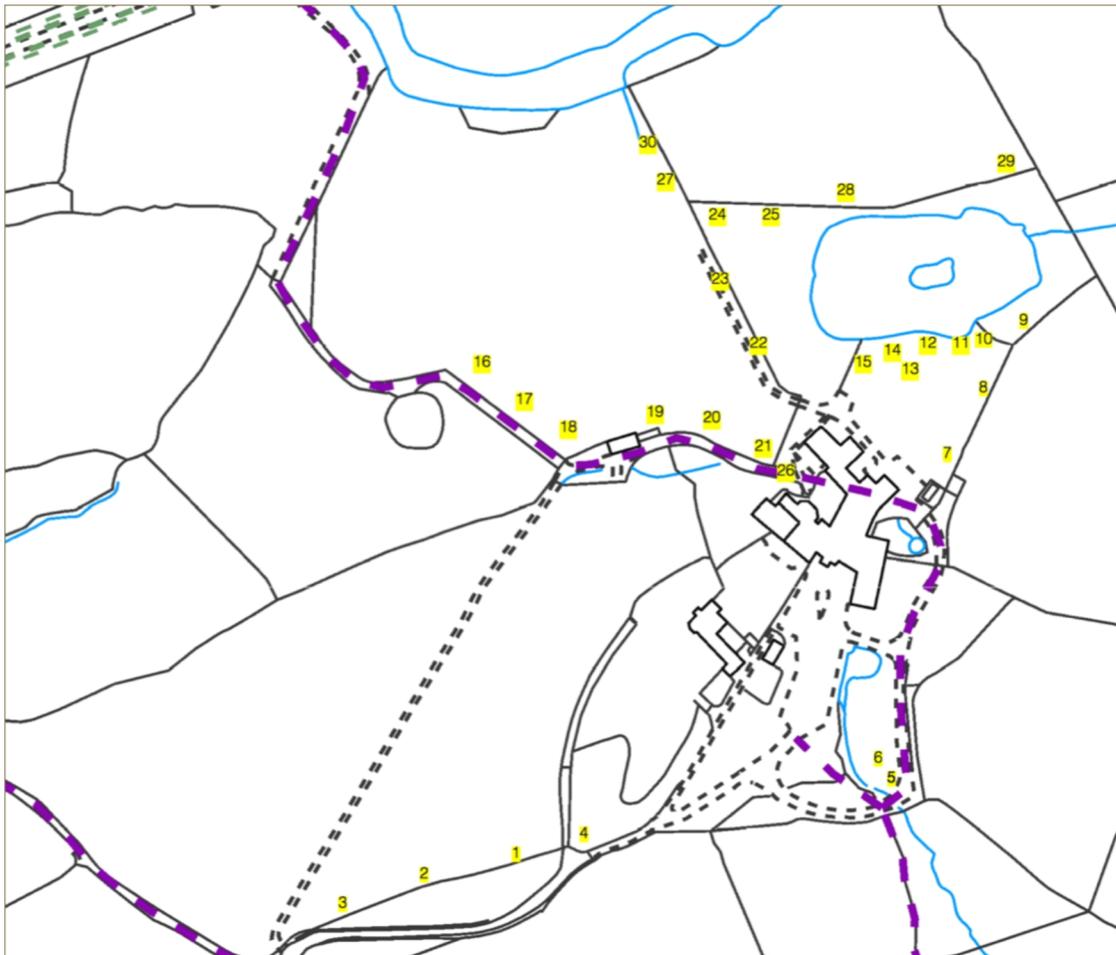


Figure 2. Location of reptile tiles

Table 4 Date and weather conditions on reptile surveys

Date	4/5/18	10/5/18	16/5/18	17/5/18	22/5/18	31/5/18	8/6/18
Temperature	15	12.5	13	11	18	20	17
start time	10:00	12:50	17:00	09:00	17:05	16:25	07:50
wind	W3-4	SW 4	NE3	NE 2	N 3	NE1	0
cloud	0	5%	100%	50%	0	100%	50%
dry/wet	dry	dry	dry	dry	dry	dry	dry

Table 5 Results of reptile surveys

Tile	4/5/18	10/5/18	16/5/18	17/5/18	22/5/18	31/5/18	8/6/18
1							
2							
3							
4			toad		toad	2 toads	
5	vole nest						small toad
6		vole					wood mouse
7						young toad	
8							
9							
10							
11			male slowworm				
12							
13	3 toads			2 toads	toad	2 toads	
14	toad						
15	toad		young toad	toad			
16							
17							
18							
19							
20							
21							
22							
23							
24	toad	toad	toad	toad	toad		
25							
26				toad			
27			Juv. smooth newt				
28							
29							
30							

3.5 Habitat Assessment

The habitat on site was assessed as potentially good for reptiles in certain areas, particularly the amenity grassland on the south side of the fishing pond.

3.6 Conclusions and recommendations

The area close to the fishing pond provides suitable habitat for both reptiles and amphibians. The survey suggests reptiles are present but in low numbers.

Any development on the grassland south of the pond should take reptiles into consideration during any construction works.

3.6.1 Safe Working Methods

Any long vegetation will be strimmed down to 10 cm in height to discourage repopulation. Following a minimum of 24 hrs from strimming, a destructive search will be undertaken, involving scraping up of the turf and first few centimetres of soil surface, with an ecologist present to rescue any individual reptiles found. This would be undertaken in weather suitable for reptiles to be active (warm and dry with little wind).

3.6.2 Capture and Release

Animals will be captured by appropriately trained and experienced personnel and species held in appropriate containers and transported immediately to a release site. An appropriate container will comprise good ventilation, a secure lid and plenty of dry bulky vegetation such as hay. Best practice methods will be used as outlined in the Herpetofauna Workers' Manual (JNCC, 2003)¹.

3.6.3 Receptor Site

A suitable receptor site will be located and agreed. This will be but away from any construction areas. Surveys will be undertaken at the proposed receptor site to ensure a current low level of reptile population. The receptor site would be monitored every five years to ensure continuing suitable conditions.

¹ Gent, T. and Gibson, S. (2003) Herpetofauna Workers' Manual, Joint Nature Conservation Committee (JNCC).