



Ecological Appraisal Report:

Former Tirbach Washery, Tirbach Road, Ystallyfera

March 2019

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Summary

I & G Ecological Consulting were commissioned to undertake an updated ecological appraisal of an area of land approximately 11 hectares in size, on the north-eastern edge of Ystallyfera, in the Upper Swansea Valley. (see Fig. 1).

The land within the site boundary (edged yellow, see Fig. 2), consists predominantly of previously developed land, colonised by a mixed scrub and ephemeral/short perennial vegetation, with large areas of hardstanding and bare ground with broad-leaved woodland forming a central belt and a riparian corridor along the eastern boundary.

The site is suitable for a number of protected animal species, principally Badgers, Otters (Riparian zone only) and reptiles. The woodland and scrub form an extensive area for bird nesting.

No signs of European protected species were encountered on the site, however non-native invasive species were noted.

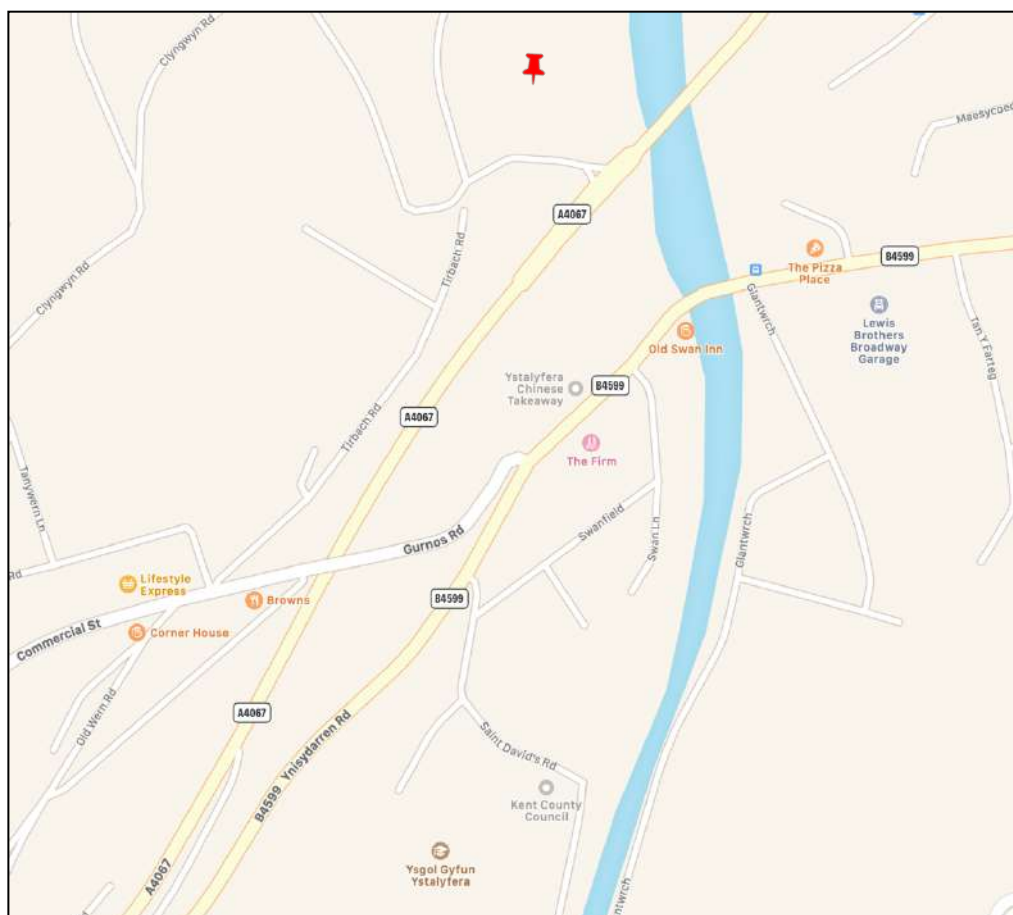


Figure 1: Location Map (from apple.maps ©)



Former Tirbach Washery, Ystallyfera, Upper Swansea Valley



1. INTRODUCTION

- 1.1.1 I & G Ecological Consulting were commissioned to undertake an ecological appraisal of an area of land at the former Tirbach Washery site, Ystallyfera, in the Upper Swansea Valley. The site is approximately 11 hectares in size.
- 1.1.2 This report presents the findings of both a desk study and a site appraisal undertaken in March 2019. The report outlines the ecological constraints/opportunities associated with the site.
- 1.1.3 The survey was conducted **during sub-optimal conditions** as vegetation survey can be limited outside of the main flowering season for grassland/brownfield habitats.

2. METHODOLOGY

- 2.1.1 Both a desk-based survey and an ecological site survey were undertaken to establish the ecological conditions on site.
- 2.1.2 A field botanical survey was carried out using survey methods that were based on standard Phase 1 Habitat survey techniques. The CIEEM Guidelines for Preliminary Ecological Appraisal were also followed and adhered to.

2.2 *Badgers*

- 2.2.1 The surrounding habitat was assessed for its suitability for badgers which includes the presence of setts, well-worn paths and runs, snagged hair, latrines, footprints and foraging. Any such incidental signs of badgers were recorded if they were encountered.

2.3 *Otters*

- 2.3.1 The surrounding habitat was assessed for its suitability to support otters.

2.4 *Dormouse*

- 2.4.1 The habitats on site, particularly the woodland and scrub were assessed for their suitability to support dormice.

2.5 *Birds*

- 2.5.1 The habitats on site were assessed for their suitability for breeding birds, including woodland, scrub and grassland.

2.6 *Bats*

- 2.6.1 Habitats on site were assessed for their suitability to support bats, particularly any trees or buildings on site that could have bat roosting potential or opportunities.



2.7 Reptiles

2.7.1 The habitats on site were assessed for their suitability to support reptiles.

2.8 Amphibians

2.8.1 The habitats on site were assessed for their suitability to support amphibians.

2.9 Water Voles

2.9.1 The surrounding habitats on site were assessed for their suitability to support water voles.

2.10 Non-Native Invasive Species

2.10.1 Any pernicious weeds under Schedule 9, Section 14 of the Wildlife and Countryside Act 1981 (as amended) were also noted and mapped during the site survey. These species include Japanese Knotweed (*Fallopia japonica*) and Himalayan Balsam (*Impatiens glandulifera*).

3. RESULTS

3.1 Desk study

3.1.1 A data search was requested from the West Wales Biodiversity Information Centre for the planning application site and surrounding area of up to 2km. The species information was returned to I&G Ecology on 29th March 2019 and presented in spreadsheet and GIS plot form.

These records will not be listed here, but the most significant, those which are considered to potentially be affected by development of the site, will be briefly summarised. However, the full data are available upon request to those nominated on the request form, as some data may be classified as sensitive.

3.1.2 The significant findings from the data search are summarised below: -

3.1.3 Birds

The data search returned numerous entries of birds which are categorised as priority species within 2km of the site. Species include House Sparrow (*Passer domesticus*), Redwing (*Turdus iliacus*), Linnet (*Linaria cannabina*), Bullfinch (*Pyrrhula pyrrhula*) and Tree Pipit (*Anthus trivialis*).

3.1.4 Mammals

The data search returned records of mammals within 2km of the site, most significantly these included: -

Bats (Pipistrelle species, unknown Chiroptera, Brown Long-eared, Noctule, Daubenton's)
Otter (*Lutra lutra*), along the A4067 and the Afon Twrch
Hedgehog (*Erinaceus europaeus*)



1 entry for Weasel (*Mustela nivalis*)
 Badger (*Meles meles*)
 Hazel Dormouse (*Muscardinus avellanarius*) off A48 nr. Pont Abraham

3.1.5 Invertebrates

The data search returned several records for invertebrates/insects, these include Marsh Fritillary (*Euphydryas aurinia*), Goat Moth (*Cossus cossus*) and White-line dart (*Euxoatritici*).

3.1.6 Plants

The data search returned several records of plants within 2km of the site. These include Bluebell (*Hyacinthoides non-scripta*) and Eyebright (*Euphrasia officinalis* subsp. *pratensis*).

3.1.7 Reptiles

The data search returned several records for reptiles within 2km of the site, including Grass Snake (*Natrix helvetica*), Common Lizard (*Zootoca vivipara*) and Slow worm (*Anguis fragilis*).

3.1.8 Amphibians

The data search returned records for amphibians within 2km of the site; Common Frog (*Rana temporaria*) and Common Toad (*Bufo bufo*).

3.1.9 Statutory Designated Sites

The data search showed that there are no Statutory Designated Sites such as SSSI or SAC within the search area.

3.1.10 Non-statutory Designated Sites

Local Authorities within the search area identified a series of Sites of Importance for Nature Conservation (SINCs)/ Wildlife Sites. The following SINCs lie within the search buffer:

Neath Port Talbot County Borough Council:

Ancient Semi Natural Woodland

Caeau Ynysgeinon

Glan-Yr-Afon

NPT Watercourses

Powys County Council:

Pentwyn Grasslands

Wildlife Trust Reserves

Cae Lynden

Wern Plemys

Ystradfawr



3.2 Site Appraisal

3.2.1 On site survey

3.2.2 The site survey was undertaken on 19th March 2019 by a suitably qualified ecologist. Where possible, the habitats were cross referenced to any important UK priority habitats or local habitats adopted by the Local Biodiversity Action Plan.

3.2.3 The land within the red line site boundary (see Fig. 3) consists predominantly of previously developed land, colonised by a mixed scrub and ephemeral/short perennial vegetation, with large areas of hardstanding and bare ground with broad-leaved woodland forming a central belt and a riparian corridor along the eastern boundary. There are also a number of small ephemeral waterbodies and a large pond. A number of buildings and containers are still present on the site.



Figure 3. Area surveyed (from Google maps)



3.2.4 Habitats recorded within red line boundary were as follows: -

3.3 Previously Developed Land (Ephemeral/short perennial)

- 3.3.1 There are two large areas of what can be classed as Previously Developed Land, separated by a band of broadleaved woodland (as described above). The western area is on a considerable slope and is made of shale, fine grit and other spoil, presumably the resulting waste product of the former mine workings and washery activity.
- 3.3.2 Much of the western part of the site (area *not* outlined in red Fig. 2) appears to be kept bare in places, by regular disturbance by scramblers, which is likely to create micro-habitats and together with Rabbit grazing, will maintain a mosaic of short grassland and bare open ground, favourable for many invertebrates, reptiles and possibly Wax Cap fungi in the more grassy parts.
- 3.3.3 Open ground (where there is little or no scrub developing) is colonised by low growing plants such as Wild Strawberry (*Fragaria vesca*), Shepherd's purse (*Capsella bursa-pastoris*), Common Mouse Ear (*Cerastium fontanum*), as well as carpets of moss. Much of the vegetated area in the western most part of the site has been hard grazed by Rabbits, but it is evident that the vegetation is more established and is transitioning to grassland. Soil conditions are likely to be free draining and of varying acidity, due to the previous industrial use of the site. Species here include Sheep's Sorrel (*Rumex acetosela*), Self-Heal (*Prunella vulgaris*), White Clover (*Trifolium repens*), Perforate St. John's-wort (*Hypericum perforatum*) and Wild Strawberry (*Fragaria vesca*).
- 3.3.4 The eastern section contains areas of hard standing (bases of former buildings and trackways). Here there are also larger flat areas of bare ground, some beginning to be colonised by Willow scrub (see Fig. 4).



Figure 4. Ephemeral/Short Perennial and Moss dominated ground (SE and NW areas of site respectively)



3.4 Scrub

- 3.4.1 There are patches of both dense and scattered scrub throughout the site. In places *Buddleia davidii* is the dominant species, while in other areas native species including European Gorse (*Ulex europaeus*), Western Gorse (*Ulex gallii*), Broom (*Cytisus scorparius*) and Bramble (*Rubus fruticosus* agg.) are dominant.



Figure 5. Developing and well-established scrub (with bare ground)

3.5 Semi-natural Broadleaved Woodland

- 3.5.1 There are 2 belts of Broadleaved woodland, one of which forms the eastern border which flanks the Afon Twrch, the other is central belt, effectively separating the eastern and western areas of previously developed land (See Fig. 6). Both woodlands support tree species typical of the area (Alder, Sycamore, Hazel, Ash, Birch and Oak).
- 3.5.2 Ground flora includes Common Dog-violet (*Viola riviniana*), Hart's-tongue fern (*Asplenium scolopendrium*), Enchanter's Nightshade (*Circaea lutetiana*), Scaly Male Fern (*Dryopteris affinis*) and Lesser Celendine (*Ficaria verna*).



Figure 6. Semi-natural broadleaf woodland; central belt (top) and riparian woodland east (bottom)

3.7 Buildings

- 3.7.1 There are a number of disused buildings remaining on site. These are principally constructed of concrete block with corrugated concrete roofing sheets, and a curved building of corrugated concrete sheet (Nissen hut type). See Fig. 7 below.



Figure 7. Buildings on site (southern part of site within red-line)

3.8 Standing and flowing water

- 3.8.1 There are a number of very small areas of ephemeral standing water (see Fig. 8), within the SE portion of the site (i.e. within the red-line boundary). Additionally, and more significantly, there is a large pond within the site, close to the eastern boundary.
- 3.8.2 The pond appears to be quite shallow with relatively steep sides in places. There are stands of emergent vegetation towards the centre, predominantly Great Reedmace (*Typha latifolia*), with young Birch and Alder scrub around the banks. Low growing forbs including Perforate St. John's wort and Barren Strawberry are also present on the banks. See Fig. 9.
- 3.8.3 Tadpoles of Common Frog were noted in the shallow pond margins, and it is anticipated that the pond would be used by other amphibians including Common Toad and Newt species, as well as invertebrates such as Dragonflies and Water Beetles.



Figure 8. Small ephemeral water bodies and drainage ditch



Figure 9. Pond with vegetated banks and emergent vegetation

3.8.4 There is a small drain of flowing water running W-E, from the woodland belt, through part of the former working area/building compound, into a narrow channel of barely flowing water which supports a population of Great Reedmace (*Typha latifolia*). See Fig. 8 above.

3.9 Other habitats or features

3.9.1 There are short sections of stone retaining wall and old railway sleepers, between the former works/buildings and the central woodland belt. There are a number of rubbish piles (some as a result of the former site use, others fly-tipped). Such features may provide habitat/hibernation opportunities for reptiles, amphibians and invertebrates. See Figs. 10. and 11.



Figure 10. Rubbish and waste materials



Figure 11. Short sections of stone wall and sleepers used as retaining wall

3.10 Badgers

3.10.1 No evidence of badger activity was observed within the grassland, scrub or woodland edge vegetation during the walkover survey.

3.11 Bats

3.11.1 There are 2 buildings on the site which may have features likely to support bat roosts., however their suitability is considered to be low. There is also the possibility of underground shafts etc, which may be accessible by bats and suitable for winter hibernation. Any large mature trees in either section of woodland would require inspection if they are to be affected adversely by development.

3.12 Otters

3.12.1 No evidence of Otter activity was noted on site however there are suitable habitats adjacent to the site's eastern boundary, along the riparian zone of the Afon Twrch.



3.13 Reptiles

- 3.13.1 The site has a mosaic of habitats including areas of bare ground, with low grassland sward and areas of taller herb, scrub and stone/sleeper retaining walls. Therefore, it has the structural complexity that reptiles require to provide suitable ecotone areas for basking and cover. Most likely species are Slow Worm and Common Lizard, however it may be suitable for Adder also.

3.14 Amphibians

- 3.14.1 The pond is suitable for, and is being used by, breeding Frogs. The ephemeral water bodies and ditches may also be suitable depending on water availability, therefore, together with the scrub and other vegetation, the habitat present was considered suitable to support both a breeding population, and terrestrial phase amphibians.

3.15 Hazel Dormouse

- 3.15.1 The scrub is likely to be too sparse and/or fragmented to suit Dormice, however the larger belts of native woodland may be suitable for use by Dormice and are well connected to longer stretches of Ancient Semi-natural woodland to the north, following the banks of the River Twrch. There was 1 Dormouse record returned from the data search, however this is in Pont Abraham (well over 2km away).

3.16 Water Voles

- 3.16.1 The pond represents potentially suitable Water Vole habitat, if the bankside vegetation becomes significantly more lush (providing food and cover) in the months towards summer.

3.17 Birds

- 3.17.1 A considerable number of bird species were seen/heard on site, these include Grey Wagtail (*Motacilla cinerea*), Goldfinch (*Carduelis carduelis*) and Green Woodpecker (*Picus viridis*). The mix of scrub and woodland provides good nesting, cover and foraging opportunities for birds.

3.18 Invasive non-native species

- 3.18.1 There are a number of notable non-native species evident on site currently. These are: Japanese Knotweed (*Falopia japonica*) and Butterfly Bush (*Buddleia davidii*). Emerging seedlings of Himalayan Balsam (*Impatiens glandulifera*) are also present along the riparian corridor/eastern boundary and it is expected that it is prevalent here which will be more obvious as the growing season progresses. Specimens of Rose of Sharon (*Hypericum calycinum*) were also present in low numbers.



3.18.2 These species are listed on Schedule 9 of the Wildlife and Countryside Act in England and Wales therefore; it is an offence to plant or otherwise cause to grow these species in the wild.



Figure 12. Japanese knotweed along western boundary of site

4. ECOLOGICAL ASSESSMENTS

4.1.1 The following values have been provided to assess the importance of an ecological feature value within a geographical context, as recommended within the CIEEM Guidelines for Ecological Impact Assessment (2016) and the CIEEM Guidelines for Ecological Report Writing (Dec.2015).

**Table 1: Ecological Value Assessments**

Importance	Examples of features
International & European	European designated or proposed sites such as Ramsar Sites, Special Protection Areas, Special Areas of Conservation, World Heritage sites or Biosphere Reserves; or otherwise meeting criteria for European or International designation. Sites supporting populations of European important species. Species listed within the Annex's of The Conservation of Habitats & Species Regulations 2010
National	Nationally designated sites such as Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), areas of key habitats and species within the UK Biodiversity Action Plan. Sites supporting viable breeding populations of Red Data Book (RDB) species (excluding scarce species), or supplying critical elements of their habitat requirements. Species listed within the schedules of the Wildlife & Countryside Act 1981.
Regional	Sites containing viable areas of threatened habitats and species listed in a regional Biodiversity Action Plan, sites exceeding Site of Importance for Nature Conservation (SINC) criteria. Sites supporting viable populations of Nationally Scarce species or those included in the Regional Biodiversity Action Plan on account of their rarity, or supplying critical elements of their habitat requirements.
High Local	Sites meeting the criteria for a county, vice county or metropolitan area designation (such as SINC), which may include amenity and educational criteria in urban areas. Ancient semi-natural woodland. Designated Local Nature Reserves. Sites containing viable areas of any key habitat type or species identified in the Local Biodiversity Action Plan (LBAP). Sites supporting viable breeding populations of species known to be county/metropolitan rarities e.g. featuring in county 'red data book' or LBAP, or supplying critical elements of their habitat requirements.
Moderate Local	Undesignated sites or features considered appreciably to enrich the habitat resource within the context of the Borough or District, or included in the Borough or District LBAP. Amenity and educational functions will be recognised in urban areas. Sites with viable breeding populations of species listed as rare in the District or Borough LBAP or supplying critical elements of their habitat requirements.
Low Local	Undesignated sites or features considered appreciably enriching the habitat resource within the context of the Parish or neighbourhood.
Negligible	Low-grade and widespread habitats.

4.1.3 Table 2: Impact level Criteria

Severe	Permanent impacts
Major	Loss of feature and/or quality and integrity of feature; severe damage to key characteristics, features or elements.
Moderate	Loss of feature, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
Minor	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements
Negligible	Very minor loss or detrimental alteration to one or more characteristics, features or elements
Neutral	No impacts



4.2 Assessments on the Habitats & Species Identified During the Survey

4.3 Previously developed land

- 4.3.1 It is predicted that the grassland and ephemeral/short perennial vegetation are likely to be slightly more species-rich than was evident at the time of survey (early Spring) and may support a suite of plant/lower plant and invertebrate species typical of such brownfield sites in the South Wales valleys. The whole site should be viewed as a mosaic and has the potential to qualify as a SINC under the NPT SINC Criteria Guidelines. With this in mind, the habitat value has been assessed as: **Moderate Local (with the potential to be High Local following further specialist survey).**

4.4 Scrub

- 4.4.1 The mixed species scrub, together with young Willow and other developing scrub will provide nesting and foraging opportunities for wildlife of the local area, principally birds and small mammals. Loss of the less dense scrub in the eastern (red-line) section may be less significant than the more established dense scrub found in the north and western portion of the site. The value of the scrub has been assessed as Low Local, however, if viewed as an integral part of the wider Previously Developed Land mosaic, then its value is considered to be **Moderate Local**, and its loss would be **Moderate**.

4.5 Semi-natural Broadleaved Woodlands

- 4.5.1 The woodlands constitute corridors between other woodland and scrub adjacent to the site and acts as a riparian corridor along the valley of Cwmtwrch. Both areas will be valuable to wildlife and their value should be considered to be **Moderate Local**. Their total loss to development would be considered **Moderate - Major** (depending on their significance as a feature when included in the whole category of Previously Developed Land).

4.6 Waterbodies

- 4.6.1 Ponds, ditches and other waterbodies are important for a range of species including Amphibians, Reptiles, Invertebrates and Plants. As an additional feature of a brownfield site they are likely to increase the biodiversity value. Until further survey (for Great Crested Newts if required by NPT planning ecologist), their value has been deemed as **Moderate**.

4.7 Buildings and Other features

- 4.7.1 The buildings, stone walls and debris may harbour Protected Species, and until further survey, value and loss should be considered as **Moderate**.



4.8 Species (Including but not limited to; Reptiles, Birds, Invertebrates, Bats, Badger, Water Vole)

- 4.8.1 As the site consists of a mosaic of scrub, woodland and grassland, with additional water bodies; the whole site constitutes bird, reptile and invertebrate habitat. The woodland, denser scrub and grassland have the potential to support Badgers and Bats (resting places and foraging). Until further species/group specific survey, the site should be considered Moderate with the potential to be **High (e.g. if it meets SINC criteria for NPT)**.

5. CONCLUSIONS AND RECOMMENDATIONS

- 5.1 The combination of desk and field surveys undertaken at the proposed development site identified that the majority of the area within the planning site boundary has Moderate Local ecological value but with the potential to be High (e.g. if it meets SINC criteria for NPT).

5.2 Habitats on site

- 5.2.1 In terms of the site's ecological potential, the mosaic nature of the brownfield areas, woodland and scrub means that the site is likely to be utilised by most animal groups including mammals, birds, invertebrates, reptiles, amphibians. Additionally, these sites can be important for lower plants such as Lichen, Moss and Fungi. The site should be assessed against the NPT SINC Criteria.

5.3 Birds

- 5.3.1 Both the woodland and scrub are likely to be utilised by a significant number of bird species, some of which will be of Conservation Concern. It is therefore imperative that bird habitat is taken into consideration within any development layout plan, and preferably a good proportion of it be retained which connects to wider habitats. All nesting birds are protected under Section 1 of the Wildlife and Countryside Act of 1981. Therefore, vegetation clearance should be planned outside the nesting bird season.

5.4 Reptiles

- 5.4.1 The site is suitable for reptiles; given the mix of bare ground, grassland, scrub and tall herb, this site has the potential to support several species of reptile and therefore **a full reptile survey is recommended**.

5.5 Non-Native Invasive Plants (Schedule 9)

- 5.5.1 There are several non-native invasive plants on site, all of which require eradication, in advance of site preparation. A suitable Treatment Strategy should be agreed with the Planning Authority as part of any Planning Application.



5.6 Bats

- 5.6.1 The buildings and any underground structures should be subject to a bat survey, with an initial assessment of likely use preceding any full survey. Mature trees should also be assessed for likelihood of use by bats if they are to be lost to development.

5.7 Amphibians

- 5.7.1 The pond and slower flowing part of any ditches/drain may be suitable for Great Crested Newts and a full GCN survey should be considered. The closest records for Great Crested Newt are likely to be the known population at Llandarcy, approximately 12 miles from the site.

5.8 Badgers

- 5.8.1 A Badger Survey should be undertaken to determine the presence/absence of setts and associated features, in particular within the woodland and more dense scrub, if these habitats are to be adversely affected by development, or would be within 30m of the working area.

6. LEGISLATION

6.1 Otters and the Law

- 6.1.1 The otter is a European Protected Species (EPS). It is against the law to damage or destroy an otter breeding site or resting place, or deliberately to capture, kill, injure or disturb an otter.
- 6.1.2 Otters are fully protected by the following pieces of legislation:
- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects otters, making it **an offence to:-**
 - *Intentionally or deliberately capture, injure or kill an Otter.*
 - *Damage or destroy a breeding or resting place of an Otter, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
 - *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.*
 - *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*



- Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000) fully protects otters, making it **an offence to:-**
 - *Intentionally or recklessly disturb any otter while it is occupying a structure or place which it uses for shelter or protection*
 - *Intentionally or recklessly obstructs access to any structure or place used by an otter for shelter or protection*
 - *Sell, offer or expose for sale any otter*

6.1.3 For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;

- i. granting the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
- ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.
- iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

6.1.4 Otters are also protected by:

- Natural Environment and Rural Communities Act 2006 and now the Environment (Wales) Act 2016.
- Annex II Habitats Directive (protection through Special Areas of Conservation)
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

6.2 **Bats and the Law**

6.2.1 Bats are protected by the following pieces of legislation:

- Schedule 5 and 6 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000)
- The Environmental Damage (Prevention & Remediation) Regulations 2009 – A protected species and its habitat is protected under this legislation as well as others.
- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects all bats and their roosts, making it **an offence to deliberately kill, injure or capture** (take) bats; *to deliberately disturb bats; damage or destroy bat roosts or resting places* (this is considered an “Absolute Offence” as damage and destruction may detrimentally effect the Continuous Ecological Functionality of that roost / resting place); possess or transport a bat or any part of a bat; sell (or offer for sale) or exchange bats or parts of bats.



- For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;
 - i. the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
 - ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.
 - iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

6.2.2 Bats are also protected by;

- Appendix III of the Bern Convention
- Appendix II of the Bonn Convention (including the Convention's Agreement on the conservation of Bats in Europe)
- Natural Environment and Rural Communities Act 2006 and now the Environment (Wales) Act 2016.
- All bats are listed in Annex IV of the EC Habitats Directive and the British species listed in Schedule 2 of the Habitats Regulations 1994 (as amended) and are therefore designated as *European Protected Species*. These *protected* species are afforded enhanced protection and more stringent licensing provisions than those protected by the Wildlife and Countryside Act (WACA) alone.

6.3 The Hazel Dormouse and the Law

6.3.1 The hazel dormouse is a European Protected Species (EPS). It is against the law to damage or destroy a dormouse breeding site or resting place (summer or hibernation nest), or deliberately to capture, kill, injure or disturb a dormouse.

6.3.2 Dormice are fully protected by the following pieces of legislation:

- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects dormice, making it **an offence to:-**
 - *Intentionally or deliberately capture, injure or kill a dormouse.*
 - *Damage or destroy a breeding or resting place of a dormouse, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
 - *Intentionally or recklessly disturb a dormouse in a place used for shelter or protection, or deliberately disturb dormouse in such a way as to be likely*



significantly to affect (i) the ability to survive, breed, rear or nurture their young, and includes in the case of animals of a hibernating or migratory species, to hibernate or migrate or (ii) the local distribution or abundance.

- *Intentionally or recklessly obstruct access to a place used for shelter or protection.*
 - *Possess a dormouse (alive or dead), or any part of a dormouse*
- Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000) fully protects dormice, making it **an offence to:-**
 - *Intentionally or recklessly disturb any dormouse while it is occupying a structure or place which it uses for shelter or protection*
 - *Intentionally or recklessly obstructs access to any structure or place used by a dormouse for shelter or protection*
 - *Sell, offer or expose for sale any dormouse*

6.3.3 For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;

- i. granting the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
- ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.
- iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

6.3.4 Dormice are also protected by;

- Natural Environment and Rural Communities Act 2006 (England) and the Environment (Wales) Act 2016.
- Annex II Habitats Directive (protection through Special Areas of Conservation)
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

6.4 Reptiles and the Law

6.4.1 All of the UK native reptiles are protected by law. The common species of reptiles found in this locality are common lizard, slow-worm, adder and grass snake. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).

6.4.2 All native UK reptiles are considered of 'principle importance' under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its



functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

- 6.4.3 Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species (which includes all reptiles species) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

6.5 Amphibians and the Law

- 6.5.1 All of the UK native amphibians are protected by law. The common species of amphibians in this locality are common frog, common toad, smooth newt and palmate newt. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).
- 6.5.2 The common toad is considered of ‘principle importance’ under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 6.5.3 Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species (which includes the Common Toad) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

6.6 Birds and the Law

- 6.6.1 All species of bird are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Protection was extended by the Countryside and Rights of Way (CROW) Act 2000. Under the above legislation it is an offence to intentionally:
- kill, injure or take any wild bird;
 - take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
 - take or destroy an egg of any wild bird.
- 6.6.2 Certain species are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive protection under Sections 1(4) and 1(5). The protection was extended by the Countryside and Rights of Way (CROW) Act 2000. There are special penalties where the offences listed above are committed for any Schedule 1 species and it is also an offence to intentionally or recklessly:
- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or



- disturb the dependant young of any such bird.

6.7 Badgers and the Law

- 6.7.1 The protection of Badgers Act 1992 makes it illegal to kill, injure or take a badger, or interfere with a sett. In addition, they are listed on Schedule 6 of the Wildlife & Countryside Act 1981, which prohibits certain methods of killing and capture.

6.8 Water Voles and the Law

- 6.8.1 Water voles are listed under Schedule 5 of the Wildlife & Countryside Act 1981, receiving full protection since 2008. The Wildlife & Countryside Act 1981 (as amended), lists the following offences:-

- Intentionally kill, injure or take water voles (Section 9 (1)).
- Possess or control live or dead water voles or derivatives (Section 9 (2)).
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection (Section 9 (4) (a & c)).
- Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose (Section 9 (4) (b)).
- Sell water voles or offer or expose for sale or transport for sale (Section 9 (5)).
- Publish or cause to be published any advertisement which conveys the buying or selling of water voles (Section 9 (5)).

6.9 Environment Act (Wales) 2016

- 6.9.1 This act has replaced the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty. It came into force in May 2016.
- 6.9.2 Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. Under Section 6 public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.
- 6.9.3 Section 7 of the Act places a duty on public authorities to take steps to maintain and enhance biodiversity. This section replaces the duty in section 42 of the NERC Act 2006. The Section 7 Priority Species under this act is a list of the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. The Section 7 Priority Habitats is a list of the habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.



7. REFERENCES

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We confirm that in preparing this Report we have exercised reasonable skill and care, taking into account the project objectives, the agreed scope of the work and prevailing site conditions.

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9. Representative Species Lists of principal habitats

Previously Developed Land (Ephemeral/short perennial)

Species	Frequency
Barren Strawberry - <i>Potentilla sterilis</i>	A
Broad-leaved Dock – <i>Rumex obtusifolius</i>	R
Cleavers - <i>Galium aparine</i>	F
Colt's-foot - <i>Tussilago farfara</i>	O
Common Mouse-ear - <i>Cerastium fontanum</i>	F
Common Ragwort - <i>Senecio jacobaea</i>	O
Dandelion - <i>Taracum agg.</i>	A
Germander Speedwell - <i>Veronica chamaedrys</i>	F
Hogweed - <i>Heracleum sphondylium</i>	R
Lesser Celandine - <i>Ranunculus ficaria</i>	F
Perforate St.John's-wort - <i>Hypericum perforatum</i>	F
Round-leaved Cranesbill - <i>Geranium rotundifolium</i>	O
Self-heal - <i>Prunella vulgaris</i>	A
Sheep's Sorrel - <i>Rumex acetosella</i>	F
Shepherd's Purse - <i>Capsella bursa-pastoris</i>	A
Smooth Sow Thistle - <i>Sonchus oleraceus</i>	O
Spring turf-moss - <i>Rhytidiadelphus squarrosus</i>	D
Willowherb spp. - <i>Epilobium</i> spp.	A
Woodsage - <i>Teucrium scorodonia</i>	O
Wild Strawberry - <i>Fragaria vesca</i>	A
White-clover - <i>Trifolium repens</i>	A

Semi-natural broadleaved woodland

Species	Frequency
Canopy & Shrub Layer	
Ash - <i>Fraxinus excelsior</i>	F
Alder - <i>Ulnus glutinosa</i>	F
Beech - <i>Fagus sylvatica</i>	O
Dog Rose - <i>Rosa canina</i>	O
Elder - <i>Sambucus nigra</i>	R
Hawthorn - <i>Crataegus monogyna</i>	O
Hazel - <i>Corylus avelana</i>	F
Holly - <i>Ilex aquifolium</i>	F
Pedunculate Oak - <i>Quercus robur</i>	O
Silver Birch - <i>Betula pendula</i>	A
Sycamore - <i>Acer pseudoplatanus</i>	O
Willow spp. - <i>Salix</i> spp.	F



Ground Flora	
Barren Strawberry - <i>Potentilla sterilis</i>	F
Bluebell - <i>Hyacinthoides non-scripta</i>	O
Common Dog-violet - <i>Viola riviniana</i>	O
Enchanter's-nightshade - <i>Circaea lutetiana</i>	A
Foxglove - <i>Digitalis purpurea</i>	O
Heart's-tongue Fern - <i>Asplenium scolopendrium</i>	F
Honeysuckle - <i>Lonicera periclymenum</i>	R
Ivy - <i>Hedera helix</i>	A
Lesser Celendine - <i>Ficaria verna</i>	F
Scaly Male Fern - <i>Dryopteris affinis</i>	F
Wild Strawberry - <i>Fragaria vesca</i>	F
Wood Avens - <i>Geum urbanum</i>	F

Scrub (including introduced Shrub)

Species	Frequency
Broom - <i>Cytisus scoparius</i>	O
Buddleia - <i>Buddleia davidii</i>	A
Bramble – <i>Rubus fruticosus</i> agg.	A
European Gorse - <i>Ulex europaeus</i>	R
Japanese Knotweed - <i>Fallopia japonica</i>	F
Leyland Cypress - <i>Cupressus × leylandii</i>	R
Rhododendron - <i>Rhododendron ponticum</i>	R
Rose of Sharon - <i>Hypericum calycinum</i>	R
Western Gorse - <i>Ulex galii</i>	O
Willow - <i>Salix</i> spp.	D

Waterbodies

Species	Frequency
Hard Rush - <i>Juncus inflexus</i>	F
Reedmace - <i>Typha latifolia</i>	A
Water Mint - <i>Mentha aquatica</i>	F



10. SEWBRc Data Search

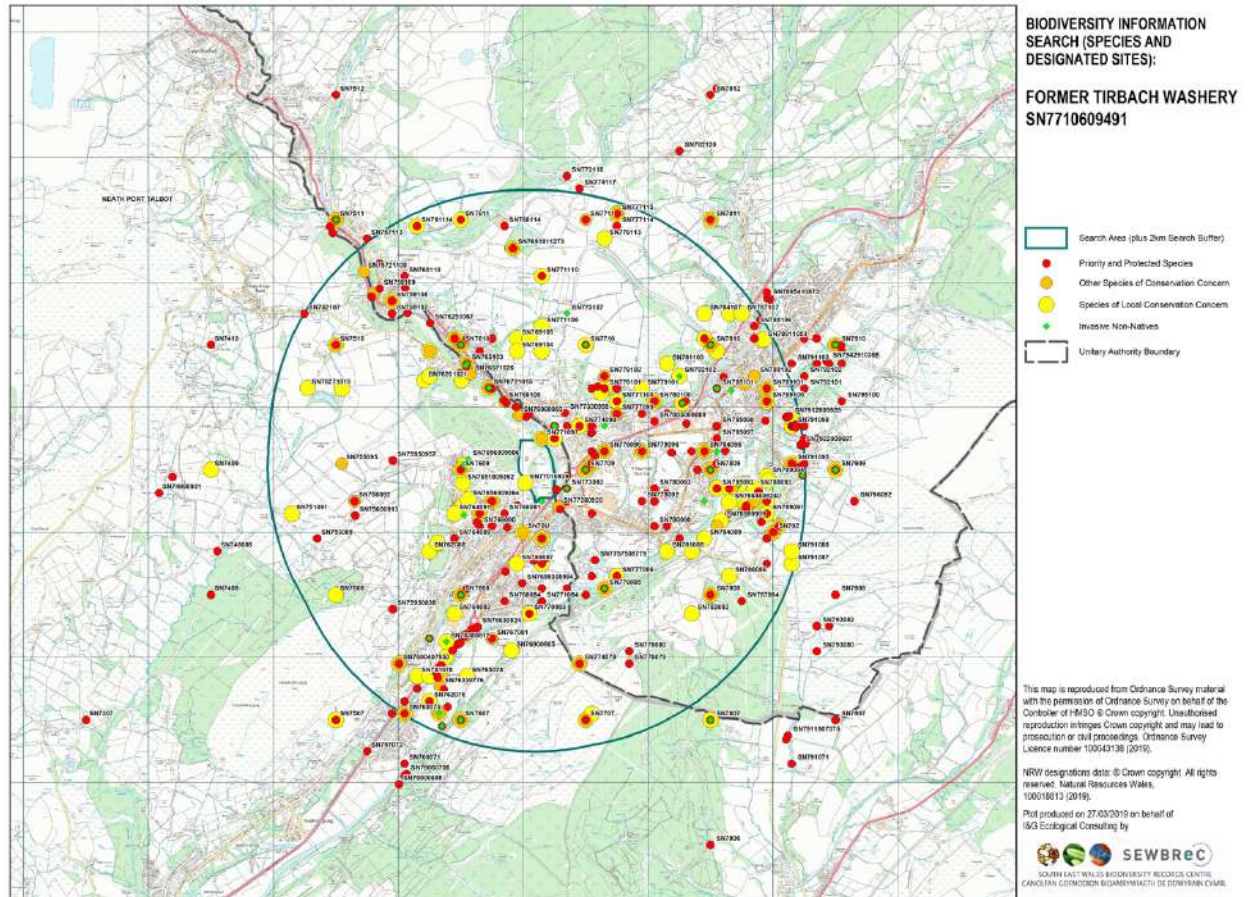


Figure 13. SEWBRc Priority Species Data Search 29th March 2019

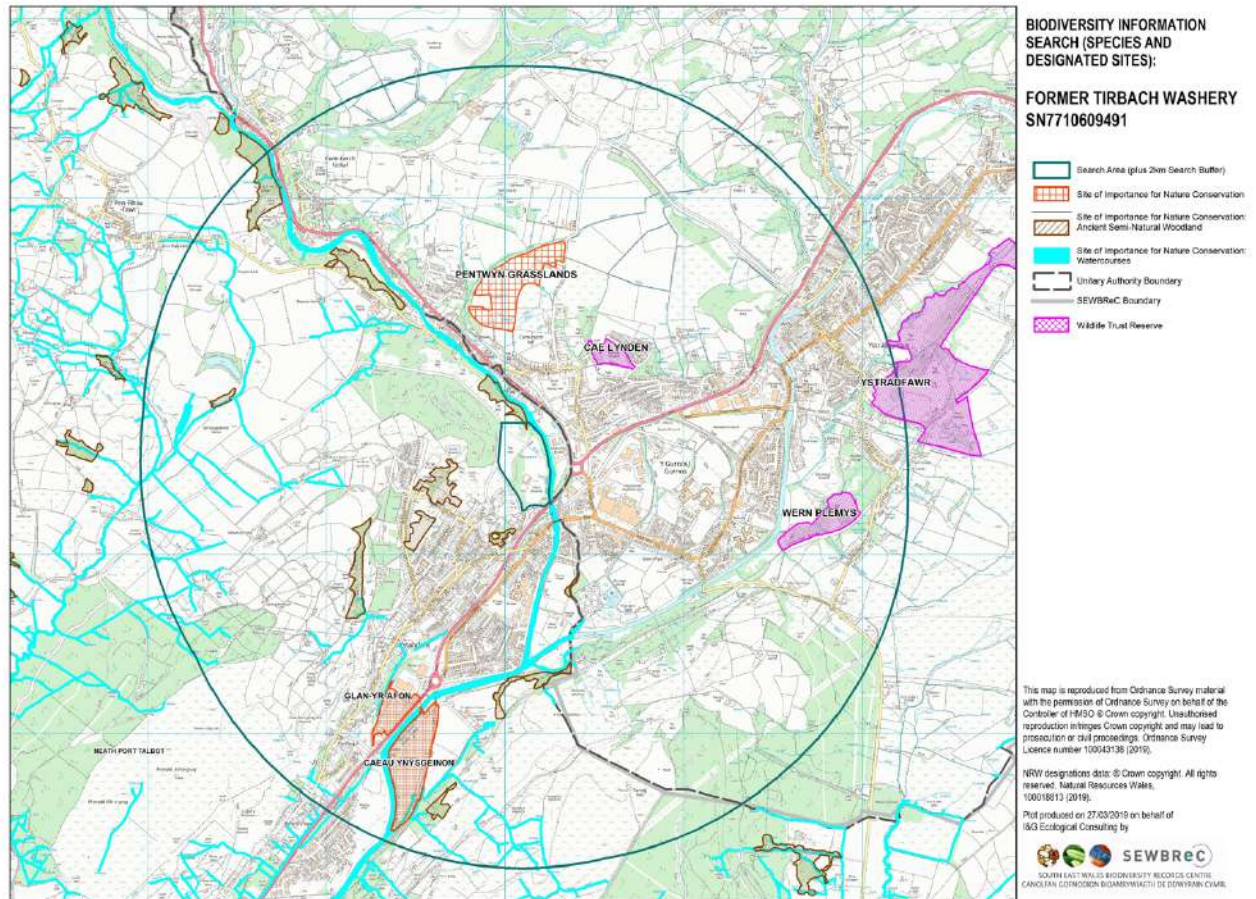
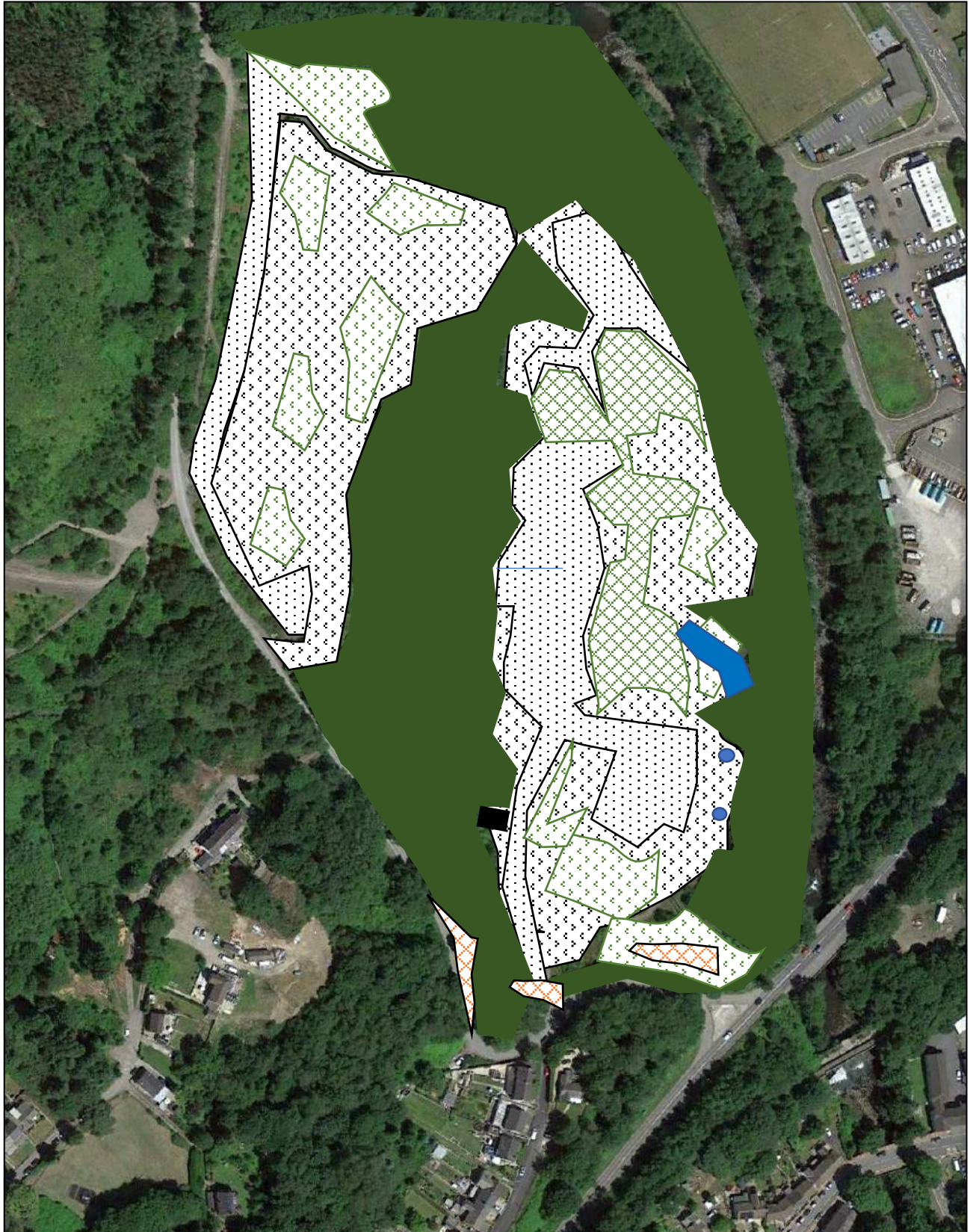


Figure 14. SEWBRc Protected Sites Data Search 29th March 2019

11. Phase 1 Plan and Key





Phase 1 Plan Key:

Colour	Code	Description
	A2.1	Dense continuous scrub
	A2.2	Scattered scrub
	J1.4	Introduced shrub
	J4	Bare ground
	G1	Open Standing Water
	J1.3	Ephemeral/short Per.
	J3.6	Buildings