

Extended Phase 1 Habitat Survey

at

Ryelands Holiday Park

Kilgetty

Pembrokeshire SA68 0UY

Client: Mr M Ormond

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DISCLAIMER

This report was prepared for the specific purpose of carrying out a Phase 1 walkover survey on land at Ryelands Holiday Park, Kilgetty and no liability will be accepted for use for other purposes or by third parties. Information supplied by the client and third parties has been taken as being correct and no liability can be accepted for errors and omissions. It has been assumed that the client has disclosed all relevant information whether asked for or not.



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EXECUTIVE SUMMARY

Habitat Matters Ltd was instructed by the client, Mr M Ormond, to provide an ecological assessment in relation to a proposed development on the caravan park at Ryelands Holiday Park, Kilgetty, Pembrokeshire.

The site has been assessed as amenity grassland of low ecological value. The site boundaries are predominantly hedgerows with woody shrubs. These areas will, on the whole, be unaffected by the proposals.

It is considered that there will be no negative impact on the local or regional ecology through the development of the site. There are, in fact, considerable opportunities for positive amenity and biodiversity gain through the various enhancement measures that have been included in the proposals.



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1.0 INTRODUCTION

Habitat Matters Ltd was instructed by the client, Mr Mike Ormond, the owner of Ryelands Holiday Park, to provide an ecological assessment to support a planning application to Pembrokeshire County Council for the upgrade and expansion of the current facilities.

1.2 SITE DESCRIPTION & ECOLOGICAL CONTEXT

(Photos of the site are included at Appendix 2)

Ryelands is located just to the north of Kilgetty, Pembrokeshire and is one of several caravan sites in the area. The northern edge of Kilgetty is approximately 250m south of the park and the boundary of the Pembrokeshire Coast National Park approximately 1.5km to the south.

Ryelands Holiday Park comprises two fields. The established site is on a gently-sloping, free-draining area of improved, amenity grassland with caravan standings and some access tracks, which rises up to an open tree line along a north-south orientated ridge, acting as an informal boundary between the two fields. The eastern field – also improved grassland - slopes gently away from here towards the eastern boundary of the site, beyond which is an established public footpath (the Miner's Walk) following a sheltered farm track. A pedestrian gate on the eastern boundary allows holiday visitors access to the footpath.

There are no watercourses on, or adjacent to, the site.

Most of the external site boundaries are earth banks, topped by hedges with occasional mature trees. The site itself has several sections of mature Leylandii hedge; these provide shelter and screening for the caravans.

2.0 METHODOLOGY

The survey, assessment and reporting was carried out in-line with the Preliminary Ecological Appraisal (2012) guidelines produced by the Chartered Institute of Ecology & Environmental Management (CIEEM), the Phase 1 Habitat Survey methodology (JNCC 2010), the British Standards for Biodiversity: Code of Practice for Planning and Development (BS42020:2013) and other relevant species best practice guidelines.

Following an initial desk study, a walk-over survey of the site was carried out to assess the habitat, the potential value for various species and any potential constraints for the development.



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2.1 Desk Study

A desk-study was carried out prior to the field survey. This included:

- Reference to OS Maps and aerial photographs in order to identify potential areas of habitat interest that may be impacted by the proposals or may support species that could be affected.
- Reference to data obtained from West Wales Biodiversity Information Centre (WWBIC) on Protected Habitats and Species within a 2km buffer of the site.
- Reference to BS:42020 and best practise guidelines
- Reference to relevant legislation

Landscape Context

The site and wider landscape was assessed using Google Earth aerial images, Ordnance Survey maps and WWBIC habitat/protected sites maps. This enabled an assessment to be made of off-site features and habitats, and therefore the potential impact of the development on the local biodiversity. The proximity of different habitats and the connectivity of linear features between areas of habitat outside the site boundary and the site itself were included within this assessment.

The wider landscape is one of improved agricultural land with generally small to medium agricultural grassland fields divided by hedges. An extensive area of mixed broadleaf and coniferous woodland (Kilgetty Wood) runs along Ford's Lake valley, a short distance to the east of the site. There is good connectivity via the hedgerow linkages between this woodland, the site itself and a second valley with semi-natural habitat and a number of ponds to the west. Folly Farm, a popular tourist attraction, is approximately 600m to the west of Ryelands.

2.2 Phase 1 Habitat Survey

A walk-over field survey of the proposed site and the immediate area, where accessible, was carried out by Fiona Lanc MCIEEM, on the 13th February 2018. Conditions were cold, clear and dry during the survey and enabled an assessment to be made with respect to the potential impact on biodiversity. The suitability of the recorded habitats for supporting different animal species, including signs and incidental sightings, was also considered during the survey.

The survey provided an assessment of the habitat types and the likelihood of the development having an impact on protected fauna. It included:

- A survey for non-native invasive species, including Japanese Knotweed.
- A search for signs of badger activity on the site
- An assessment of the potential for impact on birds, including suitable nest sites within the area.
- An assessment of the potential impact of the development on bats
- An assessment of the likely impact on other notable species, such as reptiles, dormice, otters and water vole



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3.0 EVALUATION OF ECOLOGICAL FEATURES & IDENTIFICATION OF POTENTIAL IMPACTS

3.1 HABITATS

3.1.1 Protected Sites

There are no areas with statutory protection within the site boundary and no priority habitats within or adjoining the site. The site is located approximately 1.5km north of the Pembrokeshire Coast National Park Authority boundary. Nearby Kilgetty Wood is designated as Ancient Woodland and also, partly, as a Plantation on Ancient Woodland Site (PAWS), a priority habitat.

The WWBIC data did not return any local sites of wildlife interest within 1km of the survey area. There are a number of species records within the search area but none are associated with (or close to) the site itself. Records of bluebell (*Hyacinthoides non-scripta*) are included for several hedge banks nearby, indicating that these are likely to be ancient hedgerows.

3.1.2 Habitat Survey

The site and the immediate area was classified as improved grassland under the historic Phase 1 Habitat Survey (Nature Conservancy Council 1993-96) map obtained from WWBIC.

The habitats identified during the survey are as follows:

Improved Amenity Grassland

Both fields are regularly mown, short amenity grassland with low botanical diversity. Species noted included ryegrass (*Lolium*), daisy (*Bellis perennis*), clover sp (*Trifolium sp*), broadleaved dock (*Rumex obtusifolius*), creeping buttercup (*Ranunculus repens*) and ribwort plantain (*Plantago lanceolata*). A small, circular area in the eastern field appears to be nutrient enriched (perhaps from grass cutting storage); this has a large proportion of coarser grasses including couch (*Elymus repens*) and cocksfoot (*Dactylis glomerata*), increased broadleaved dock and also common nettle (*Urtica dioica*), creeping thistle (*Cirsium arvense*) and yarrow (*Achillea millefolium*). The yarrow is probably present as a result of wildflower seed having been sown here in recent years to create a wildflower meadow. A small area in the southern corner of the site is now used for grass cuttings; this is overgrown with tall ruderals, mainly nettle, broadleaved dock and bramble.

Neither of the grassland areas are particularly interesting from an ecological aspect and the proposed development is not considered to have a negative impact on the biodiversity value. In fact, given the proposals for enhancing the wildlife opportunities on the site, there is likely to be a considerable positive biodiversity gain.



Field Boundaries

Hedgebanks are included within the Traditional Field Boundaries Priority Habitat in the Pembrokeshire Biodiversity Action Plan and are important for wildlife connectivity, providing food, refuge and nesting sites for a range of different species. They also have considerable landscape value.

The majority of the site boundaries at Ryelands are hedges; these are regularly trimmed and fairly dense mixed native species, including hazel (*Corylus avellana*), blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), willow sp (*Salix* sp), holly (*Ilex aquifolium*) and oak (*Quercus*) with bramble (*Rubus fruticosus*), ivy (*Hedera helix*), dog rose and honeysuckle (*Lonicera periclymenum*). Groundflora includes bluebells, Hart's tongue fern (*Asplenium scolopendrium*), hard fern (*Blechnum spicant*), foxglove (*Digitalis purpurea*) and celandine (*Ficaria verna*); there is likely to be more visible diversity later in the year, once plants start to re-grow after the winter. The western hedge and parts of the eastern hedge contain a large proportion of holly. Some of the oak have developed as trees (but none are considered to be mature specimen trees).

A line of semi-mature beech (*Fagus sylvatica*) have been planted along the ridge between the two areas of the site. A wooden post-and-rail fence runs along the eastern side of the trees; this is in poor condition. The trees are widely spaced and have no shrubby growth in between; although they are a linear feature and provide connectivity across the site and potential bird song-posts, their ecological value is otherwise limited.

The original caravan field includes several sections of Leylandii hedge, planted as shelter and screening for the visitors. Most of these are internal, short hedges apart from the northern boundary hedge and a short section around the toilet block on the southern boundary. Some of these hedges have become over-mature due to lack of maintenance in the past.

All the site boundaries are to be retained under the proposed development.

Buildings & Hardstandings

There are a limited number of buildings on the original site (including the reception area, caravans, the caravan standing areas and the access paths). These provide little ecological interest. The eastern field has no buildings, hardstandings or tracks. The current proposals do not impact on the buildings.

3.1.3 Invasive Non-Native Species

There was no evidence of invasive species, such as Japanese Knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*), on the site.



3.2 SPECIES

An assessment was carried out into the suitability of the site and adjacent areas for a number of animal species including those listed under the Conservation of Habitats and Species Regulations 2010 (as amended); the Wildlife and Countryside Act 1981 (as amended); the Natural Environment and Rural Communities (NERC) Act 2006 Section 42 Habitats or Species of Principle Importance for Conservation of Biological Diversity in Wales; UK Biodiversity Action Plan (UK BAP) priority species or Local BAP (LBAP) priority species; Nationally rare or nationally scarce species; and Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber Lists).

The information from WWBIC returned no published records of protected species close to the site.

Bats

The hedges are suitable foraging and commuting routes for bats and, as already noted, provide good connectivity through the site between the nearby woodland and the valley on the western side. However, the short-mown grassland areas are not good quality foraging habitat. All the hedges are to be retained and it is considered that there will be no adverse impact on the local bat population providing the site lighting is managed to avoid it lighting up the hedges.

Birds

The boundary hedges and hedgerow trees are good habitat for nesting songbirds, providing cover and feeding opportunities. As these hedges are to be retained, there will be no loss of habitat and it is considered that there will be a very low impact on nesting songbirds, providing low light levels are included.

Badger

There is no sign of badger activity (tracks, latrines or snuffle holes) on any of the hedges or grassland. It is therefore considered that there will be no detrimental impact on the local badger population.

Reptiles

The low-cut grassland and high levels of human activity do not provide for good reptile habitat. There is potential for reptiles and amphibians to use the hedge banks as linear corridors, and these will continue to be available in the future. Development of the site is not likely to have an impact on the local reptile population.

Other Notable Species

There is no suitable habitat for otters and water vole on, or close to, the site.

The hedges potentially provide suitable habitat for dormouse. However, there are no known dormouse populations in the locality and the hedges are regularly trimmed, which tends to reduce



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the suitability. All the hedges are to be retained and the management to continue as at present. Therefore, it is considered that there will be no negative impact on dormice.

4.0 RECOMMENDATIONS FOR FURTHER SURVEY WORK

4.1 There are no recommendations for further survey work.

5.0 MITIGATION AND ENHANCEMENT

5.1 Mitigation

Lighting - a careful lighting plan should be included in the design to ensure that site lighting is directed into the site, away from the site boundaries. Light pollution due to increased nocturnal light levels, could potentially have a detrimental impact on the local wildlife, particularly foraging bats and nesting songbirds. Birds will be encouraged to start an earlier dawn chorus or the extra light may even trigger some species, such as robins, to sing during the night. These changes in natural behaviour can impact on bird reproduction. In addition, increased nocturnal light levels can make roosting birds more visible to predators. Unmitigated development could potentially have a detrimental impact on the local songbird population.

Therefore, the lighting proposals should be to maintain the current level of lighting for the site, including the use of low level bollard lighting, and for all lights be directed into the site, away from the hedges and trees.

5.2 Enhancement Measures

Wherever possible, new developments should enhance biodiversity and the natural environment by identifying opportunities to conserve important local habitats and species (Planning Policy Wales, Welsh Government, July 2014). This policy states that development should, where possible, retain, and where practicable, enhance features of conservation importance.

There is considerable opportunity for ecological enhancement at Ryelands Holiday Park. These include:

- **Woodland planting with meandering footpath in the eastern corner of the site** – *positive biodiversity gain with new habitat creation, including sheltered “ride” habitat for insects, such as butterflies, along the footpath*
- **Hedgerow shrubs to be planted along the line of beech trees** – *positive biodiversity gain of improved connectivity across the site*
- **Planting scattered shrubs/trees around the site** – *positive gain of new nesting & feeding habitat*



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- **Creation of short sections of native hedgerow** – *positive gain providing screening, amenity and wildlife value*
- **Creation of a wildflower meadow, including an area of wetland plants** – *positive gain of creating pollinator habitat*
- **Installation of bird and bat boxes on the new meet-and-greet building** – *positive gain of new nesting / roost opportunities.*

The location and methodology for these proposals is included at **Appendix 3: Enhancement Proposals**

6.0 REFERENCES

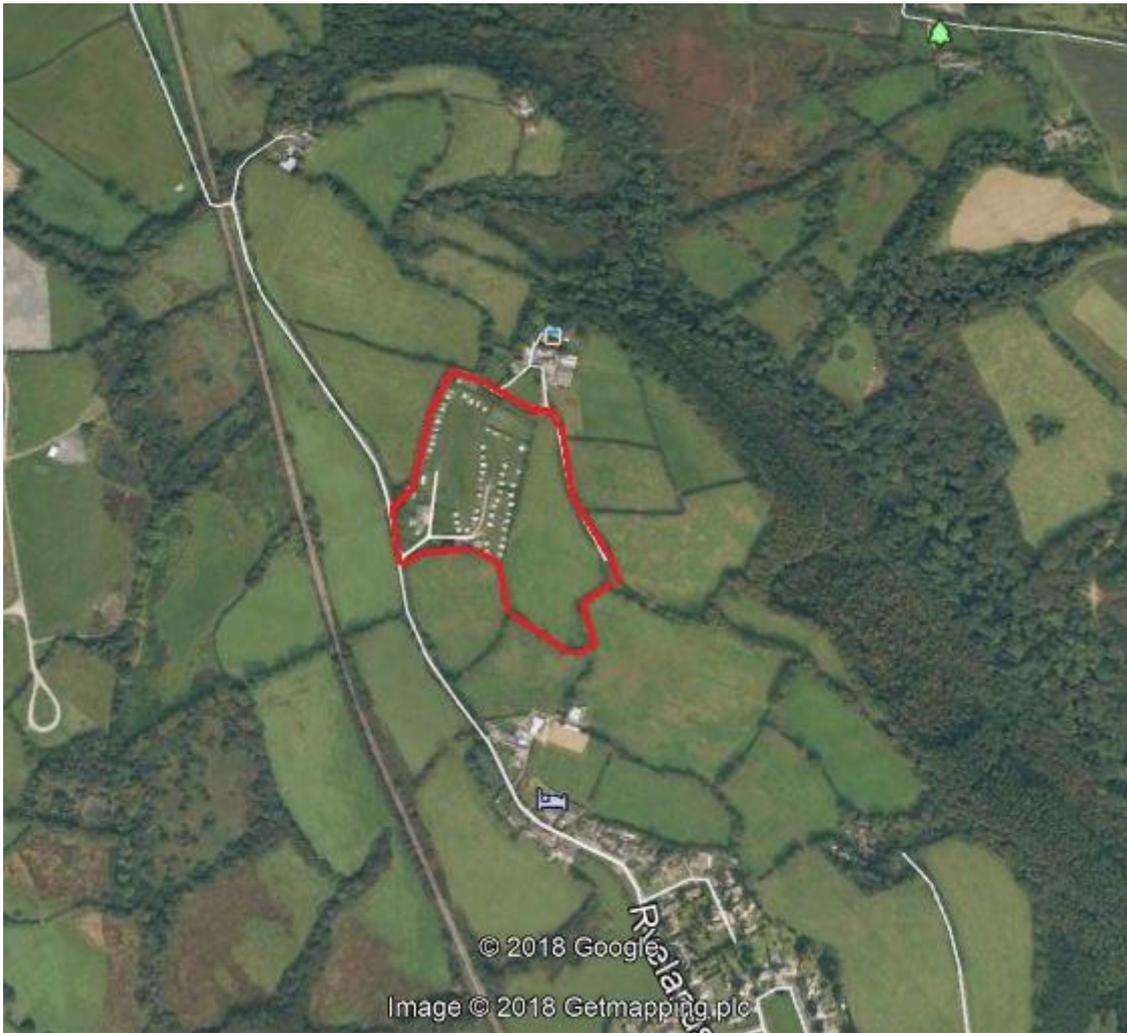
BS 42020: Biodiversity – Code of Practice for Planning & Development

List of Species & Habitats of Principle Importance for Conservation of Biological Diversity in Wales.
Wales Biodiversity Partnership/Welsh Assembly Government.



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APPENDIX 1 – SITE LOCATION



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APPENDIX 2 – SITE PHOTOGRAPHS



1. Eastern field, view N



2. Eastern field, view W across "wildflower area"



3. Eastern field, view S



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4. Western field, view S



5. Central ridge with beech trees



6. Potential for new hedge planting for connectivity

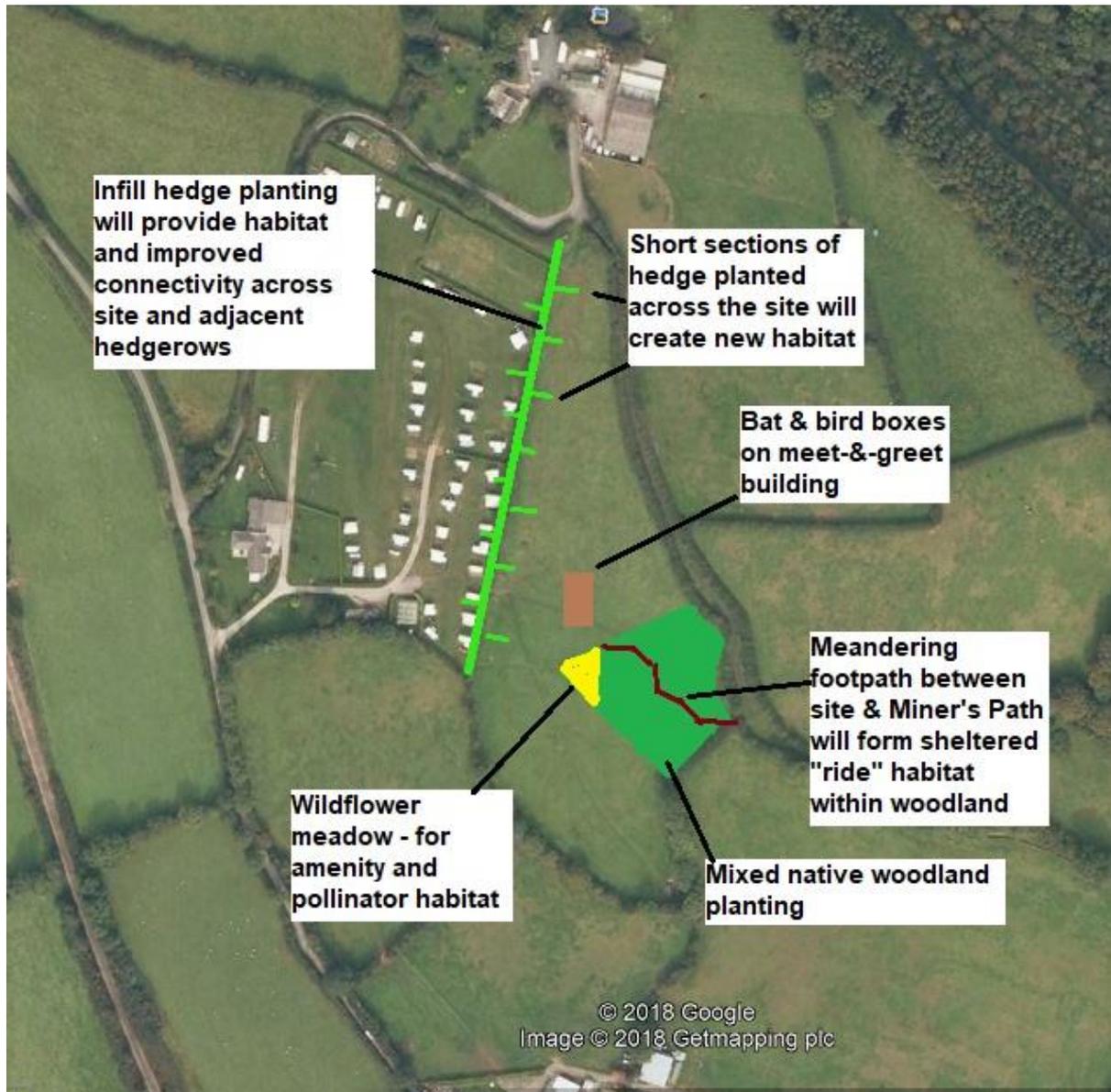




7. Miner's Walk along eastern edge of site



APPENDIX 3: ENHANCEMENT PROPOSALS



Woodland Planting - An area of mixed native broadleaved woodland will be planted in the eastern corner of the site. This will provide new wildlife habitat and also amenity interest for the site. Trees will include oak, sycamore, holly, alder and willow. Planting of occasional wild cherry (*Prunus avium*) crab apple (*Malus sylvestris*), and rowan (*Sorbus aucuparia*) will provide visual interest and also fruit and berries for birds and other wildlife. Shrub species should include hazel, hawthorn, dogwood (*Cornus sanguinea*), guelder rose (*Viburnum opulus*), elder (*Sambucus nigra*) and field maple (*Acer campestre*).



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The plants should be local provenance (303 seed zone where available but 304 as substitute) to ensure they are better adapted and genetically suited to the locality; this will improve survival rates and avoid problems of poor establishment or of introducing plants that might have different characteristics from local stock, such as coming into leaf or flower at a different time (which would have a potentially damaging impact on local biodiversity).

The planting should be carried out between October and late February (i.e.: while plants are dormant) using bare rooted stock; these should be slot planted. The holly (to include both male and female for berries) should be container grown to avoid root disturbance and should be pit planted in suitably sized pits. Planting should be carried out in small groups (of 3, 5 or 7) of the same species, randomly spaced, at 1.5m centres

Supplementary watering is unlikely to be required providing there is adequate rainfall. However, in long, dry conditions, the planting areas may need to be well-watered to avoid stressing the plants and to encourage establishment. The plants are at the most vulnerable in the first 3-4 years after planting and during this period it is essential to reduce weed competition and minimise water losses; this applies to all planting, including the woodland and hedges. A mulch layer (or mulch mats) is recommended to reduce weed growth. Alternatively, hand weeding or spot treatment with a suitable herbicide should be carried out annually, as required.

New hedgerows - planting a new hedgerow along the line of beech trees on the central ridge will significantly increase the shelter and connectivity across the site. Hedge plants will be typical of those already growing on the hedgerows and will be spaced at approximately 250mm apart in a double staggered row, with 6 plants per metre. The existing post & rail fence will provide short-term shelter and help the plants to establish. Additional short sections of hedge planting around the site will also improve connectivity and wildlife opportunities; most of these hedges will be planted direct into the existing ground level but a number of hedges will be planted on earth-banks at the end of a row of caravans (*see landscape design drawing with submitted documents*).

Overall, the new planting will provide additional habitat for birds and foraging bats and provide linkages across the area, thus increasing the biodiversity value of the site and the local area. In addition, it will create secluded caravan areas with greater privacy.

Wildflower Meadow & Bog Garden - The loss of habitat is identified as a factor in the decline of the pollinator populations (Action Plan for Pollinators, Welsh Government, 2013) and, where possible, the creation or enhancement of suitable areas (however small) is being encouraged.

A small wildflower-rich meadow area will be created on the edge of the new woodland. Native seed mixes will establish better on poorer quality ground where there is less likely to be competition from dominant species more suited to nutrient rich conditions. The selected area should therefore be stripped of topsoil and a seed mix suitable for dry, neutral grassland sown onto the nutrient poor subsoil. The seed mix should be of local origin (suitable Pembrokeshire suppliers include Wyndrush Wild www.wyndrushwild.co.uk or The Wildflower Nursery www.thewildflownursery.co.uk; the



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Wildflower Nursery also supplies plug plants) and include a larger proportion of native grasses (eg: sweet vernal, crested dog's tail, bents and fescues) together with a lesser proportion of native flowering plants (eg: ox-eye daisy, selfheal, greater knapweed, ribwort plantain, yarrow and yellow rattle).

The meadow should be managed by mowing in spring and again in late summer / early autumn once the flowering plants have set seed. All arisings should be removed from the area to avoid a build-up of mulch and organic matter. Injurious weed species, such as broadleaved dock, thistle, ragwort or nettle, should be spot treated with a suitable herbicide.

For greater diversity and interest, a wet grassland or bog garden habitat could be created as part of the wildflower meadow. Soil should be excavated to a depth of approximately 450mm and an impermeable barrier formed using a pond liner, or similar, to hold water and provide suitable conditions for plants that prefer damp or wet soil. This should be punctured at the deepest point to allow water to drain out slowly. Roof water from the nearby meet-and-greet area will be drained to this area to help supplement the rainfall. Suitable plants include flag iris (*Iris pseudacorus*), meadowsweet (*Filipendula ulmaria*), ragged robin (*Lychnis flos-cuculi*), lady's smock (*Cardamine pratensis*), water mint (*Mentha aquatica*), marsh forget-me-not (*Myositis scorpioides*), angelica (*Angelica*), bugle (*Ajuga reptans*), sedges such as Carnation Sedge (*Carex panicea*) and purple loosestrife (*Lythrum salicaria*).

Bat & bird boxes– purpose made boxes such as an open fronted box for robins or a box with a small hole for tits could be placed in a sheltered part of the on the meet-and-greet building (out of the prevailing weather, including strong sunlight), up to 3m above the ground and also on some of the beech trees. In later years, once the woodland has established, boxes could also be placed in some of the trees.

Bat boxes will provide artificial roost sites for bats and will be a valuable addition to the site, especially if sited close to the new woodland and links to the wider landscape. The following link provides information on suitable design and siting of bat boxes:

http://www.bats.org.uk/data/files/publications/Bat_Box_Information_Pack_FINAL.pdf



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APPENDIX 4: LEGISLATION

Birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence (with certain limited exceptions) to intentionally kill, injure or take any wild bird, or to damage, take or destroy the nest of any wild bird whilst that nest is being built or in use, or to take or destroy its eggs. Furthermore, the Act affords additional protection to specific species of birds listed in Schedule 1 of the Act. In respect of these species it is unlawful intentionally or recklessly to disturb such a bird whilst it is nest-building or is in, on or near a nest containing eggs or young; or to disturb their dependent young. Following recent revisions, fifty-nine species are listed on the UKBAP.

Bats

All species of bats and their roosting sites are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats etc.) Regulations 1994, updated and consolidated by the Conservation of Habitats and Species Regulations 2012. All species of UK bats are designated as 'European Protected Species' and are covered by a Species Action Plan within Carmarthenshire LBAP.

Badgers

Badgers and badger setts are protected under The Protection of Badgers Act 1992, which makes it illegal to kill, injure or take a badger, or to interfere with a sett. A sett is defined as "any structure or place which displays signs indicating current use by a badger".

Otters:

The Eurasian Otter is protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981 (as amended), being listed in Schedule 5 of the act. Under the legislation it is an offence to:

- Deliberately, capture, injure or kill an Otter;
- Damage, destroy or obstruct their breeding or resting places;
- Disturb otters in their breeding or resting places.

Offences under Section 9 carry a maximum penalty of a fine up to £5000, imprisonment for up to six months, or both, for each animal in respect of which an offence is committed. There is, however, provision within the legislation to kill, take, disturb or possess otters or to use prohibited methods to kill or take under a licence in certain defined circumstances, if the issue cannot be resolved by any alternative means. Licenses can be granted for a variety of purposes, including development.



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Water Vole:

Water Voles and their habitats are afforded protection under Section 9 of the Wildlife & Countryside Act 1981 (as amended). Under the legislation it is an offence to:

- Intentionally kill, injure or take (capture) a water vole;
- Possess or control a live or dead water vole, or any part of a water vole or anything derived from a water vole;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place which a water vole uses for shelter or protection
- Intentionally or recklessly disturb a water vole while it is occupying a structure or place which it uses for shelter or protection;
- Sell, offer or expose for sale, or have in one's possession or transport for the purpose of sale, any live or dead water voles, or any part of a water vole or anything derived from a water vole;
- Publish any advertisement, or cause any advertisement to be published, which is likely to be understood as conveying that a person buys or sells, or intends to buy or sell, any of the above things.

Offences under Section 9 carry a maximum penalty of a fine up to £5000, imprisonment for up to six months, or both, for each animal in respect of which an offence is committed.

Invasive Species

Japanese Knotweed is listed under Schedule 9, Part 11 of the Wildlife and Countryside Act 1981, making it an offence to plant or otherwise cause it to grow in the wild. Care should be taken to avoid bringing in or removing material contaminated with Japanese Knotweed during the site development.

Reptiles

There are four widespread species of British reptile, comprising grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and common lizard (*Zootoca vivipara*). These animals are protected under the Wildlife and Countryside Act 1981 (as amended). They are given so called 'partial protection', which prohibits the deliberate killing or injury of individuals. The habitats of common reptiles are not specifically protected.



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