

**Preliminary Ecological Appraisal  
for a development  
at Roch Gate Motel,  
Roch,  
Pembrokeshire**

**Client: Nick Neuman**

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## 1. Introduction

Wyndrush Wild was contracted to carry out a preliminary ecological appraisal in support of an application to Pembrokeshire Coast National Park Authority for a proposed development at and adjoining the former Roch Gate Motel. The proposal entails the demolition of an existing motel, and the construction of a new tourist development here and in an adjoining field. The grid reference is SM 874 208 (see figure 1 below).

The aim of the survey is to provide current data on habitat and species, both on and adjacent to the site. The survey also investigated potential impacts that may occur during construction and post-construction stages, and assessed any potential impact on protected sites or species in the area.



*Roch Gate Motel (approximate boundary of application area in red)*

## Site Description

The site comprises the derelict buildings at Roch Gate, together with two intensively-managed leys to the south and west of the former motel. An area of damp ground and scrub divides the field, which are bounded by largely defunct hedgebanks.



*Proposed Development Site*

## **2. Methodology**

### **2.1 Desk Exercise**

A partial desk exercise was carried out. The Newgale to Little Haven Coast SSSI (part of the West Wales Marine SAC) lies almost 2km away to the west. This would not be directly impacted by the proposed development. However, good practice during construction work and operation, together with the maintenance of appropriate buffer zones, will be required to ensure that the development does not result in pollution of the adjoining stream (Bathesland Water) which drains into the SAC. The Western Cleddau River SSSI, part of the Cleddau Rivers SAC, lies 1km away to the south-east. There is no hydrological connection to this site.

### **2.2 Extended Phase I Survey**

A thorough site inspection was made on 9<sup>th</sup> February 2023. The survey followed the methodology set out by the Handbook for Phase 1 Habitat Survey (JNCC, 1993) and then subsequently by the Institute of Environmental Assessment (1995). The methods provide quick and accurate classification of habitats.

In addition, the survey looked for field signs of protected species and assessed the habitat for their potential presence. Measures taken included:-

- A search for signs of badgers and otters on the site.
- Consideration of the potential impact of the development on bats and other protected species.
- Recording breeding birds and identifying the suitability of the habitat for nesting birds especially those listed as species of conservation concern.
- Recording a list of plants found on the site, shown in Appendix 1.

### **2.3 Constraints**

There were no significant constraints to survey. Breeding birds could not be recorded due to the time of year, although some resident species could be noted. Plant life was identifiable from vegetative material.

### 3. Results

#### 3.1 Vegetation and habitat survey

The habitats at and adjoining the application area were recorded in detail. The application area predominantly comprises built ground (J3.6) and improved grassland (B4). Around the southern boundary, there is a small area of poor-semi-improved grassland (B6) and marshy grassland (B5). The fields are bounded by hedgerows, both intact species-poor (J2.1.2) and defunct species-poor (J2.2.2), and subdivided by a band of scrub (A2.1). There are no permanent watercourses on the site, but a damp hollow contains inundation vegetation (F2.2) and there are seasonal waterflows associated with this.



*Phase I habitat map*

TN1: Inundation vegetation / former pond

TN2: Small patch of marshy grassland B5

## Improved Grassland B4



*Both fields comprise rye-grass leys*

The two fields comprise leys strongly dominated by Italian rye-grass. Associates are all agriculturally-favoured species such as white clover, dandelion, daisy and broad-leaved dock. The fields had recently received slurry applications.

The habitat is of no ecological significance.

**Inundation Vegetation F2.2 / Marshy Grassland B5**

*Creeping bent dominates this shallow hollow or former pond*

A shallow hollow near the centre of the site perhaps marks the site of a former pond, now enriched by run-off and strongly dominated by creeping bent and Yorkshire fog. There is some soft rush, fool's watercress and creeping buttercup, but no open water. A damp channel running south from here is similarly marked by these plants, together with some common water starwort and tufted hair-grass. There are no accompanying indicators of marshy grassland here, but a small soft rush-dominated patch around the southern boundary of the site also held bog stitchwort, hemlock water-dropwort, common fleabane, sharp-flowered rush and wild angelica. Raised clay ground alongside this to the south supports disturbed, rough grassland with some yellow flag iris, jointed rush and marsh bedstraw in drier grassland with common bent, lesser knapweed and young gorse. This was mapped as poor semi-improved grassland (B6).

The habitat is of minor ecological significance.



### Built Ground J3.6



*The former motel and associated hardstanding*

The motel is edged by introduced shrubs, and has an associated tarmac hardstanding to the south. This is weathering and in places supports a few annual plants including rue-leaved saxifrage and common whitlow grass as well as common mosses such as *Didymodon nicholsonii*. Ivy-leaved toadflax, a St. John's-wort and scattered young bushes of grey willow were also noted. A grassy area is developing in one corner, with an abundance of trailing tormentil.

The habitat is of little ecological significance.

## Hedgerows – Intact Species-poor J2.1.2 / Defunct J2.2.2 / Dense Scrub A2.1



*Blackthorn dominates the boundary hedgerows*

Boundary hedges are strongly dominated by blackthorn, flailed annually and lacking any standard trees. The associated ground flora holds only ubiquitous species typical of nutrient-enriched situations, such as nettle and goosegrass. The eastern and western boundaries are largely defunct, comprising banks with bracken and coarse grasses. Between the fields, there is a corridor of blackthorn, accompanied to the south by an area of bracken, bramble and gorse.

The scrub habitats will support a variety of insects and some breeding birds, and are of some minor ecological interest as a result.



*Scrub between the two fields in the southern part of the site comprises gorse and bramble (left) and blackthorn (right)*

### **3.2 Protected species**

Badger runs were found in several places along the northern boundary hedge, but no setts, latrines or signs of foraging were found on the site. The development will not affect badgers.

The proposed development site is of low suitability for amphibians, having no standing water and little in the way of potential hibernacula.

The site is also generally of low suitability for reptiles, although there may be some potential for grass snakes to use the damp grassland. The proposed development would appear to be of low risk to reptiles, and no further survey should be required.

There are no watercourses and no signs of otters were found.

The winter survey date did not permit recording of breeding birds, but several birds of conservation concern have the potential to breed in the scrub, including dunnocks (amber-listed in the UK) and linnets (red-listed in the UK). The former was noted singing in the southern area of scrub. There is some potential for skylark to attempt nesting in the silage fields, although presumed early cutting dates mean that these are unlikely to be successful.

Bat survey on the former motel is due to be carried out, and will be reported separately. There is no potential for roosting bats elsewhere on the site. The central scrub corridor may provide a foraging and commuting corridor for bats, as may the more intact hedgerow sections to the north and south.

### **3.3 Invasive Species**

The shrubs associated with the former motel include Himalayan cotoneaster and wall cotoneaster. The latter is restricted to the vicinity of the buildings, but the former has begun to spread into the scrub corridor to the south. These are both classed as Section 9 invasive species in the Environment (Wales) Act 2016, and are known to pose significant risks to wildlife habitat in some parts of the county. White stonecrop, a lower risk invasive non-native, was also present on tarmac areas.

## **4. Discussion**

### **4.1 Scheme Details**

The development proposal is for the demolition of the former motel buildings, and the redevelopment of this area and the adjoining fields as a tourist development. No further details were available prior to survey.

### **4.2 Recommendations**

#### **4.2.1 Running Water**

Although there is no permanent running water on site, the damp ground in the central corridor marks the head of the Bathesland Water, a stream which drains into the nearby West Wales Marine SAC. Cessation of slurry inputs to the currently intensively managed fields may well reduce nutrient pollution here, but construction and any ongoing drainage associated with the scheme should be mindful of the potential for pollution to reach the stream. Depending on the nature of the scheme, the potential for impact pathways on the nearby West Wales Marine SAC may require consideration.

#### **4.2.2 Breeding Birds**

Any clearance of woody vegetation should take place outside of the bird breeding season (March 1<sup>st</sup> – August 31<sup>st</sup>), unless specific survey for nesting birds is undertaken. Retention of the current area of scrub in the centre of the site is desirable to maintain breeding dunnocks and potentially other Birds of Conservation Concern.

#### **4.2.3 Lighting**

To reduce or avoid potential impacts on nocturnal wildlife, any external lighting associated with the scheme should be minimised. Lights should be downward-directed and hooded to avoid excess light-spill, and on time sensors with a short duration. LED lighting, although energy-efficient, has been found to impact more significantly on moths, good populations of which might currently be expected within the woodland and scrub areas around the site.

#### **4.2.4 Invasive Species**

Two high-risk invasive species are present on site, and a Biosecurity Risk Assessment should be required to detail how these will be treated prior to site development. Any landscaping associated with the scheme should avoid the use of such known invasives, together with other potentially invasive species listed by [Thomas \(2010\)](#). Use of locally-native species or natural regeneration should be preferred.

#### **4.3 Promotion of Biodiversity at the Site**

Pembrokeshire Coast National Park Authority requires that biodiversity enhancements are included in all developments to meet the Authority's Duty of Care under Section 6 of the Environment Act 2016.

Any relaxation of the intensive grassland management regime currently in place will begin to provide biodiversity benefits. Cutting and removal in the absence of any fertiliser or slurry inputs would be needed for many years before wildflowers are likely to benefit, but nutrient-enrichment of the adjoining damp ground and damp hollow / former pond would also lessen.

The damp hollow could be excavated as a shallow wildlife pond, with the vegetation and spoil removed well away from the edge.

Defunct hedgerows could be re-established through planting of suitable locally-appropriate native species. Any other tree planting proposed should also use locally-appropriate broadleaved species.

Some biodiversity features could also be incorporated in the landscaping associated with the development, and this will certainly be the case if good 'wildlife gardening' principles are employed, using native species where possible. Bat boxes could be incorporated within the proposed new buildings.

### **5. Summary and Conclusions**

The proposed development does not impact on any protected habitats. No protected species are likely to be affected, although bat survey will be carried out prior to building demolition to ensure that no roosting bats are present. Opportunities exist to provide biodiversity gain, for example through changes to grassland management, pond creation and re-establishment of hedges.

## 6. References

Handbook for Phase I habitat survey Nature Conservancy Council 1990

Thomas, S (2010). *Horizon-scanning for invasive non-native plants in Great Britain*. Natural England Commissioned Reports, Number 053.

## Appendix 1

Plant species recorded at the site during the walkover visit 9/02/2023

Common Bent	<i>Agrostis capillaris</i>
Creeping Bent	<i>Agrostis stolonifera</i>
Meadow Foxtail	<i>Alopecurus pratensis</i>
Wild Angelica	<i>Angelica sylvestris</i>
Parsley-piert	<i>Aphanes arvensis</i>
Fool's Watercress	<i>Apium nodiflorum</i>
False Oat-grass	<i>Arrhenatherum elatius</i>
Hart's-tongue Fern	<i>Asplenium scolopendrium</i>
Daisy	<i>Bellis perennis</i>
Common Water-starwort	<i>Callitriche stagnalis</i>
Lesser Knapweed	<i>Centaurea nigra</i>
Spear Thistle	<i>Cirsium vulgare</i>
Wall Cotoneaster	<i>Cotoneaster horizontalis</i>
Himalayan Cotoneaster	<i>Cotoneaster simonsii</i>
Hawthorn	<i>Crataegus monogyna</i>
Ivy-leaved Toadflax	<i>Cymbalaria muralis</i>
Cock's-foot	<i>Dactylis glomerata</i>
Tufted Hair-grass	<i>Deschampsia cespitosa</i>
Scaly Male Fern	<i>Dryopteris affinis</i>
Male Fern	<i>Dryopteris filix-mas</i>
Common Whitlow-grass	<i>Erophila verna</i>
Goosegrass	<i>Galium aparine</i>
Marsh Bedstraw	<i>Galium palustre</i>
Atlantic Ivy	<i>Hedera helix hibernica</i>
Yorkshire Fog	<i>Holcus lanatus</i>
a St John's-wort	<i>Hypericum sp.</i>
Yellow Flag Iris	<i>Iris pseudacorus</i>
Bristle Club-rush	<i>Isolepis setacea</i>
Common Ragwort	<i>Jacobaea vulgaris</i>
Sharp-flowered Rush	<i>Juncus acutiflorus</i>
Jointed Rush	<i>Juncus articulatus</i>
Soft Rush	<i>Juncus effusus</i>
Italian Rye-grass	<i>Lolium multiflorum</i>

Perennial Rye-grass	<i>Lolium perenne</i>
Daffodil	<i>Narcissus sp.</i>
Ribwort Plantain	<i>Plantago lanceolata</i>
Annual Meadow-grass	<i>Poa annua</i>
Trailing Tormentil	<i>Potentilla anglica</i>
Creeping Cinquefoil	<i>Potentilla reptans</i>
Blackthorn	<i>Prunus spinosa</i>
Bracken	<i>Pteridium aquilinum</i>
Common Fleabane	<i>Pulicaria dysenterica</i>
Lesser Spearwort	<i>Ranunculus flammula</i>
Creeping Buttercup	<i>Ranunculus repens</i>
Bramble	<i>Rubus fruticosus</i>
Broad-leaved Dock	<i>Rumex obtusifolius</i>
Rue-leaved Saxifrage	<i>Saxifraga tridactylites</i>
White Stonecrop	<i>Sedum album</i>
Bog Stitchwort	<i>Stellaria uliginosa</i>
Dandelion	<i>Taraxacum officinale</i>
White Clover	<i>Trifolium repens</i>
European Gorse	<i>Ulex europaeus</i>
Nettle	<i>Urtica dioica</i>
Wall Speedwell	<i>Veronica arvensis</i>
Thyme-leaved Speedwell	<i>Veronica serpyllifolia</i>