

Parc Hadau - Off-site Compensation: Principles of Management

Background and Purpose of this Document

- 1.1 Development is planned by Yr Hadau Ltd at the site known as Parc Hadau, Waunsterw (the Development Site). The proposed development site forms part of a non-statutory designated Site of Importance for Nature Conservation (SINC ref: NPTSINC030), selected for its purple moor grass and rush pasture and wet woodland habitats. In addition, all watercourses and ancient woodland within NPT are designated as SINC. This includes the two watercourses bordering the northern and eastern boundaries of the Site (ref NPTSINC015) and two small areas of Ancient Semi-Natural Woodland (ASNW) in the north-east and south-east corners. These are contiguous with Coed Cefnllan-isaf, a large block of ASNW extending to the north, south and east (ref: NPTSINC015).
- 1.2 The Site's ecological interest is described in the Ecological Appraisal that accompanies the planning application. The proposed development will give rise to the loss of approximately 0.35 ha of marshy grassland, and approximately 0.74 ha of willow scrub (wet woodland), both of which are priority habitats, referred to under Section 7 of the Environment (Wales) Act 2016. This amounts to just over 1 ha of Section 7 habitat that will be lost.
- 1.3 Yr Hadau has made a long-term commitment to positive biodiversity management of the retained part of the Site. However, the development will give rise to the loss of more Section 7 habitat (marshy grassland and willow scrub) than can be physically or practically accommodated through their replacement within the Development Site boundary. For this reason, two options are being pursued to ensure that the proposals give rise to an appropriate amount of biodiversity compensation to account for the lost habitat.
- 1.4 The two options proposed to offset the habitat loss include:
 - a. Management of habitat at a nearby site, to encourage marshy grassland and other important habitats, with the establishment of a fund to help secure future management, along with the preparation of a management plan; or
 - b. A contribution to NPT to support biodiversity enhancement work elsewhere in the county borough.
- 1.5 Option (a) is the preferred option but it is dependent on Yr Hadau gaining agreement with NPT as landowners of the nearby site. If the first option does not gain agreement from all necessary parties, then the second option would be put in place.
- 1.6 This document sets out the principles of off-site management under option (a), above.
- 1.7 The nearby site, made up of two fields, is situated off the A4067 at Godre'r Graig and is currently in the ownership of Neath Port Talbot Council (NPT). The fields are referred to in this document as the Compensation Site and they cover a total estimated area of 3.5 ha.
- 1.8 It is intended that Yr Hadau will undertake or fund the undertaking of preparatory habitat management work at the Compensation Site, and contribute funds to NPT to enable long-term management for biodiversity of the Compensation Site. It is envisaged that ownership of the Compensation Site will remain with NPT.
- 1.9 This document sets out the principles of management of the Compensation Site. Once agreed, these can be developed into a detailed management plan.
- 1.10 The principles of management of retained land at the Development Site are set out in the Ecological Appraisal that accompanies the planning application for the proposed development. They are not considered in this document.

Ecological Interest of the Compensation Site

- 1.11 The Compensation Site was visited on 01 August by James Gillespie of BSG Ecology. The two fields were walked over to characterise them broadly in terms of their habitats, as well as to assess their potential for habitat creation / manipulation / management, as a means of providing habitat to compensate for the loss of habitat at the Development Site.
- 1.12 The habitats on the Compensation Site are broadly drier in the south-west field and wetter across most of the north-east field. There is an unmanaged overgrown hedge (now dense scrub) between the two fields, hedges along the A4067 (northern boundary) and the eastern boundary, and riverside woodland along the southern boundary, which borders the River Tawe.
- 1.13 The south-west field supports a patchy semi-improved neutral grassland which is generally fairly open and dry, supporting a moderate range of herb species, with encroaching scrub, some mature scrub, and patches of tall nitrophilous vegetation.
- 1.14 The north-east field is wetter towards the river where rush-dominated (mostly hard rush) vegetation dominates. This is generally flanked by dense and scattered scrub of (mostly) goat willow, with some patches of scrub being very dense and developing into small stands of woodland. Woody species are colonising parts of the rush-dominated habitat. The habitat retains patches with a more damp to marshy grassland characteristic (species such as gypsywort, angelica, marsh thistle and greater bird's-foot trefoil are present in patches. Occasional great burnet, meadowsweet and water mint were also noted. Himalayan balsam is also present in some locations).
- 1.15 Towards to north, the north-east field supports a drier semi-improved grassland which is heavily encroached by scrub, brambles and patches of nitrophilous tall herb vegetation in places.
- 1.16 The most recent form of management of the Compensation Site was, until recently, grazing by horses. The Compensation Site may have been 'topped' as part of this, and it may have been cattle-grazed in the past. Horse grazing ceased recently, in advance of work at the Compensation Site by NPT to create a hibernaculum to receive reptiles relocated from a nearby development project. The vegetation of the two fields appears to have been inappropriately managed for some time, with the result that there is potential to:
- a. Remove excessive scrub and manage the vegetation to retain it at optimal levels across the Compensation Site.
 - b. Cut a proportion of the rush-dominated vegetation year-on-year, in order to develop a more herb and grass-rich damp to marshy grassland sward, including removal of arisings.
 - c. Clear small patches of rush habitat to create shallow scrapes and potentially shallow ditches that will be seasonally wet, in order to diversify this area further.
 - d. Retain a proportion of the rush pasture and create open water / wetter areas within this.
 - e. Cut the grassland annually to encourage a more species-rich dry grassland sward, including removal of all arisings..
 - f. Control invasive Himalayan balsam by pulling plants at the growth stage of flowering but before they set seed.
 - g. Secure and maintain the boundaries of the fields to maximise their attractiveness as a grazing unit. If grazing by appropriate livestock can be secured at appropriate levels, then this could replace mowing of grassland and rush pasture vegetation and be undertaken at lower cost.
- 1.17 There is no public right of way onto or across the Compensation Site.

Overarching Aim

- 1.18 The overarching aim is to compensate for the loss of marshy grassland and willow scrub at the Development Site and to make for the long-term provision management of the Compensation Site.

Aims and general management principles

- 1.19 Several key habitats and species groups will be targeted in the management of the Compensation Site. These are:
- a. Marshy grassland.
 - b. Semi-improved neutral grassland.
 - c. Rush pasture with, where conditions permit, open water in a mosaic.
 - d. Scrub, mature trees and dead wood.
- 1.20 The aims of management, a rationale for the inclusion of the key habitats / species groups and for the aims, general management principles, and indicators of success are as follows:

A. Create marshy grassland

Rationale

Creation of conditions suitable for the development of marshy grassland is the key reason for the consideration of off-site compensation measures arising from the proposed development at Waunsterw. Marshy grassland will only form where perennially wet soils are present, as at the Compensation Site, which provides this opportunity. Marshy grassland is also an important habitat for foraging birds, as well as for small mammals, invertebrates and flowering plants. It is a key component of the eastern end of the Waunsterw SINC and, as such, the provision of marshy grassland local to the Development Site is a the priority.

Current resource (at the Compensation Site)

There are no significant patches of marshy grassland at the Compensation Site. It is present to a very limited extent in places around damper, more open patches within the generally rush-dominated areas, but as a whole the Compensation Site appears to have been under-managed (under-grazed) in the past. This is indicated by the dense and relatively uniform stands of rushes and the development of ranker areas of drier grassland with encroaching scrub and brambles.

Proposed measures and indicators of success

Cutting of rush pasture to open the sward and allow colonisation by more herbaceous and grassy species. Cut material could be collected and composted on site to provide localised habitat additions for the relocated population of slow worms.

The success of management should be judged over a 2-3 year timeframe, aiming for an agreed proportion of the current extent of dense rush habitat supporting developing a damp-marshy grassland habitat with a reasonable flowering plant content, and with a low percentage cover of rush species.

B. Enhance the interest of the grassland

Rationale

Neutral grassland is a Section 7 habitat that, in most cases, requires continuous and appropriate levels of management. Low-intensity interventions will encourage reversion to a flower-rich sward and increase the coverage and quality of neutral grassland locally. As such, the grassland interest should be maintained and enhanced.

Current resource (at the Compensation Site)

The grassland at the Compensation Site is moderately species-rich but appears under-managed and it is likely to be diminishing in interest and extent over time whilst inappropriate management prevails.

Proposed measures and indicators of success

Maintenance and enhancement of the grassland's interest and value will rely on timely and continued mowing or grazing at appropriate levels. At the current time, mowing is likely to be

the most practical option, but the site should be capable of accommodating livestock if the opportunity arises, with cattle being the preferred type. The extent of grassland across the two fields should be maximised (subject to the presence of other target habitats) targeting the achievement of an open, moderately species-rich sward throughout. A more detailed survey and characterisation of the grassland will enable the identification of target / indicator species and success can then be judged against the occurrence of the target species across the Site.

C. Reduce the extent of the rush pasture habitat and maintain the remaining habitat in a mosaic with open water where conditions permit

Rationale

Dense rush pasture is a generally species-poor and uniform habitat, but in a mosaic with shallow open water and bare ground it is a valuable marginal wetland habitat, potentially of botanical and entomological interest.

Current resource (at the Compensation Site)

The habitat is dense and in places almost monocultural. Remnant interest remains where the habitat is more open.

Proposed measures and indicators of success

Create and periodically maintain shallow scrapes - and potentially narrow disconnected ditches - at the lowest points of the field (this should require minimal groundwork). Long-term success will be judged by the maintenance of around (say) 15% open water within the rush habitat, and up to 25-30% open water over winter (these proportions should take account of the prevailing weather conditions at the time).

D. Maintain scrub and other woody habitat at appropriate levels

Rationale

Scrub is a valuable habitat that adds structure and shelter, particularly for birds and invertebrates. However, the development of excessive scrub compromises the potential value of other habitats and can give rise to the loss of grassland and rush pasture. Excessive scrub and woodland will also tend to dry out the wetter areas of the Site.

Current resource (at the Compensation Site)

Scrub is currently present at less approximately XXX% coverage of the grassland [TO BE DETERMINED]. It is also encroaching around the rush pasture areas. In places mature trees are present and some patches of scrub are developing into woodland.

Proposed measures and indicators of success

Scrub should be maintained at levels to be agreed and, as these levels are established, the remaining scrub should be managed on a long rotation to maintain structural diversity. It may be appropriate to apply an appropriate herbicide to a proportion of cut stumps at the outset in order to get scrub levels to appropriate levels. Cut material can be placed in habitat piles to benefit reptiles and invertebrates, and chipped material can be used to create habitat piles or spread over scrub areas on site. Success will be judged through estimation of total scrub cover.