



*CARAVAN CLUB ECOLOGICAL
SITE APPRAISAL*



**Coed-y-Llwyn
Gellilydan
Blaenau Ffestinog
LL41 4EN**



General Information

Site Name and County: Coed-y-Llwyn, Gwynedd

Grid Reference: SH684394

Area: 4.25 hectares

Date: 09/07/04

Recorder: Jessica Arnold and Tilly Tilbrook, Ecologists with Just Ecology Environmental Consultancy.

Weather Conditions: Cloudy with light rain.

Site Description

There are tarmac roads leading to grass and gravel pitches, which are surrounded by mown grass. A wooded area leads to a stream, and there are several wooded areas throughout the site. To the west of the site is a hill with a small copse which does not appear to be utilised by caravans, and could be used to enhance the site.

Context

The site is within Snowdonia National Park, and is a rural site close to Lake Bala. It is close to Portmeirion and the beaches of the Llyn Peninsula.



Habitat Information

Broad Habitats Present: Woodland, wetland, amenity grassland.

BAP Priority Habitats Present: Wet woodland.

Subsidiary Habitats Present: Dead wood.

Plant Communities Present:

Grassland Communities:

The majority of the grassland on site is closely mown, and consist of the following species: common bent grass (*Agrostis tenuis*), daisy (*Bellis perrenis*), red fescue (*Festuca rubra*), cocksfoot (*Dactylis glomerata*), white clover (*Trifolium repens*), greater plantain (*Plantago major*), creeping buttercup (*Ranunculus repens*), speedwell (*Veronica* spp.), birdsfoot trefoil (*Lotus corniculatus*), ribwort plantain (*Plantago lanceolata*), red clover (*Trifolium pratense*), yarrow (*Achillea millefolium*) and dandelion (*Taraxacum officinale* agg.). To the southeast of the site is an area of longer grasses, tall ruderal species and bracken (*Pteridium aquilinum*). Along the edge of the play area there is also foxglove (*Digitalis purpurea*), bracken and rosebay willowherb (*Chamaenerion angustifolium*). Within the wooded area of the dog walk, there are areas with no ground flora, and patches of long grass comprised of sweet vernal grass (*Anthoxanthum odoratum*), cocksfoot, common bent grass, meadow grass (*Poa* spp.), soft rush (*Juncus effusus*), bracken and bramble (*Rubus fruticosus* agg.).

There is also a long, unmown bank to the southeast of the site which contains a good diversity of species including bramble, sweet vernal grass, sorrel (*Rumex acetosa*), bell heather (*Erica cinerea*), heather (*Calluna vulgaris*), birdsfoot trefoil, prickly sow thistle (*Sonchus asper*), common cat's ear (*Hypochoeris radicata*), red clover, devil's bit scabious (*Succisa pratensis*), Yorkshire fog (*Holcus lanatus*), selfheal (*Prunella vulgaris*), red fescue, yarrow, black knapweed (*Centaurea nigra*), tormentil (*Potentilla erecta*), stitchwort (*Stellaria* spp.) and bracken.

Woodland:

There are several areas of woodland on the site – three areas labelled A-C on the map, and the fourth is the dog walk area. Area A is predominantly hazel (*Corylus avellana*), with oak (*Quercus* spp.), rowan (*Sorbus aucuparia*), blackthorn (*Prunus spinosa*) and silver birch (*Betula pendula*) also present. In this area, a reasonably diverse understorey was present, comprising bramble, bracken (*Pteridium aquilinum*), bluebell (*Hyacinthoides* spp.), and honeysuckle (*Lonicera* spp.). There was also leaf litter, a pile of dead branches and some rocks in this area, which all help to increase habitat diversity. Area B is a strip of woodland with a mix of hazel, ash (*Fraxinus excelsior*), oak, rowan, beech (*Fagus sylvatica*) and hawthorn (*Crateagus monogyna*). The understorey is predominantly bramble and bracken, with some oak and rowan saplings and areas of leaf litter. Area C is a patch of woodland with silver birch, young hazel, oak and beech. Although it is mown at the edges, there seems to be no management within the wooded area. Bracken and bramble dominate the understorey, and one mature oak is also present. In the dog walk, the woodland is alder (*Alnus glutinosa*) and willow (*Salix* spp.) near to the stream, with honeysuckle, oak, bramble, ash and ferns also present. Further away from the wet areas, hazel, ash, elder (*Sambucus nigra*) and oak are all present, along with holly (*Ilex aquifolium*) and silver birch.

Hedgerows:

The hedgerows on site were all broadly similar in species composition to the wooded areas.

Wetland:

To the east of the site is a narrow stream. It is shallow and not very wide, with a stony bed. An otter (*Lutra lutra*) spraint was found adjacent to the stream on a mossy rock.

**Habitat Evaluation**

Despite the likely high levels of disturbance by people and dogs, the stream is currently used by otters. The woodland areas are important for shelter and feeding areas for birds, although the understorey could be improved in some areas. Where the grass sward is kept short, it has little value for wildlife, however along the bank to the southeast of the site, a higher level of diversity has developed, and this area is likely to be high in invertebrate interest, and may even attract reptiles. In addition, this bank has anthills, indicating that it has been there for sometime, and is unlikely to have been improved in any way.

**Species Information**

BAP Species Seen: Otter (*Lutra lutra*) spraints were found on site.

BAP Species Potential: There is a possibility that invertebrates with action plans may be present on the unmown bank.

In addition, bats may utilise the woodland areas.

Other Notable Species: None.

Flora:

Although the short sward areas of grassland are not high in diversity, the unmown bank in the southwest corner of the site is an area of higher diversity with a good mix of species. In addition, the woodland areas are a useful habitat for nesting birds and foraging bats.

Avifauna:

The rainy weather conditions were not ideal for surveying bird species but those species seen included blackbird (*Turdus merula*), goldfinch (*Carduelis carduelis*), breeding robin (*Erithacus rubecula*), chaffinch (*Fringilla coelebs*), great tit (*Parus major*), pied wagtail (*Motacilla alba*) and jackdaw (*Corvus monedula*). The woodland provides areas for shelter, nesting and feeding opportunities and bird boxes have been provided in woodland area A.

Invertebrates:

The unmown bank provides good habitat for a range of invertebrates, and the presence of dead branches in the woodland areas provides suitable habitat for invertebrates,

particularly detritivores and other litter dwellers. Due to the weather conditions, few invertebrates were seen at the time of the visit.

Herptofauna:

None were seen, although the stream area is likely to provide suitable habitat for amphibians such as common frogs (*Rana temporaria*).

Mammals:

No mammals were seen during the site visit, though an otter spraint was found adjacent to the stream. In addition, the unmown bank provides suitable habitat for small mammals such as woodmice (*Apodemus sylvaticus*), common shrew (*Sorex araneus*) and pygmy shrew (*Sorex minutus*).



Species Evaluation

The grassland around the pitches is species poor and is kept short by frequent mowing. The unmown bank has higher species diversity and is a good habitat for small mammals such as woodmice, and for invertebrates. The woodland areas provide shelter and feeding opportunities for birds, and contain valuable dead wood habitat for invertebrates. The stream provides habitat suitable for amphibians, and there is evidence of its use by otters.

Management Recommendations

- The bank in the southwest corner of the site should remain unmown, as it provides a more diverse area for a number of groups of species.
- Care should be taken that herbicides and other chemicals are not used within 10 metres of the watercourse to prevent any possible pollution incidents.
- There is considerable potential for improving the botanical value, and therefore aesthetic appeal, of the grassland away from the edges. This could be done in one of two ways:
 - The first would involve stripping the existing turf in parts of the site (in order to remove both the existing species and the topsoil layer), creating a fine seedbed and broadcasting a locally sourced wildflower seed mix (Appendix I) onto the bare ground.
 - The second would involve broadcasting of the same locally sourced wildflower seed mix into the existing sward. Harrowing of the existing turf would be required in order to create gaps for seedling germination. The sward would need to be mown quite short prior to harrowing and broadcasting and kept short for the first 10 days after broadcasting in order to reduce competition to the germinating seedlings from the established grasses. No fertilisation would be required.

The former method is the most reliable; the latter method is a less disruptive way to increase the wild flower value of the sward, but carries the risk that a greater proportion of the seed will fail to establish both due to competition from the existing grasses and to the higher fertility of the soil.

Seed rates would not need to be high – 2 to 6 grams per square metre is a typical seed rate for this form of diversification.

If a mix with low growing species is used, the sward can be maintained as a short lawn from October to April and mown infrequently (i.e. every six to eight weeks) during the growing season in order to maintain an average height of roughly 10 cm.

- Removal of grass cuttings instead of leaving them in situ. This will help to gradually reduce the fertility of the soil and coarse grass species will cease to outcompete the finer, less vigorous grasses and wildflowers.

Further Suggestions to Enhance the Wildlife Value of the Site

- Erection of bat and bird boxes across the site to further encourage these species.
- There is the possibility of creating an artificial otter holt in an undisturbed location along the stream. Appendix I gives further information on this, and a good source of information would be the local Wildlife Trust

Further Survey or Information Requirements

The unmown bank has the potential to be of considerable interest, and an invertebrate survey is likely to yield interesting results.

Appendix I

Constructing an artificial holt

Location.

- Build close to the waters edge, where otters can easily climb the bank
- Choose a site which has minimal disturbance from humans and dogs

Materials

- 20 - 25 logs about 1 metre long and 30 - 40cm in diameter
- A quantity of fairly straight poles, and tree branches, about 3 - 10cm in diameter x 3 metres long. (Any shorter poles can be used to infill gaps.)
- Brushings - large amounts of small branches from hedgerows or coniferous trees.

Larger timber should preferably be taken from fallen trees or trees thinned as part of a planned woodland management programme.

Construction.

Construction takes place in three stages. The aim is to provide several dark and dry interconnecting chambers. The overall shape depends upon the site and can be rectangular, square or circular.

- Place the logs to form 6 - 8 chambers of about 1 square metre each. Leave gaps about 15 - 20cm wide as entrances. One or two entrances should be immediately at the waters edge with other entrances on the landward sides.
- Place the poles across the chambers to form the roof. Fill in gaps with small pieces of wood to make the chambers darker and more weather proof.
- Pile the brashings on top to completely hide the logs and poles and leave the chambers dry and dark. Branches should lie flat and be packed down. Lay branch stems inwards with the smaller branches/fronds overlapping the logs and poles to form an outer fringe.

If the site is liable to flooding, stretch sheep netting over brashings and stake the netting down on both sides of the holt. Place more brashings on top to hide the wire.