

TWO CHALETS FOR HOLIDAY USE AT PENTWYN ISAF, MERTHYR CYNOG LD3 9SB

BIODIVERSITY ENHANCEMENT AND LANDSCAPING SCHEME

Introduction

This scheme is prepared and submitted in support of an application for consent to construct two chalets for holiday letting at Pentwyn Isaf as part of the drive to diversification of the farm business operated by the owners.

The site is in a spectacular approximately 370m AOD, with the south. The broad strategy lodges is to offer interest and enhancement without interrupting approach also recognises that at robust and vigorous, limited to habitat but will not spoil what is essentially a ‘wild’ place,



position, elevated at views down the Ysgir Valley to adopted for planting around the opportunity for biodiversity views of or from the lodges. The this elevation planting must be trees that will offer interest and

With the above in mind the landscaping scheme is also a part of the scheme for enhancement of biodiversity and is incorporated into a single scheme for consideration.

Proposals

The applicant is committed to wildlife preservation and will introduce the ‘aids’ to biodiversity set out below.

1. BATS

- 1.1 Purpose-built bat boxes will be purchased from Greenwood Ecohabitats or suppliers of equivalent products. The boxes are constructed to assist in retention of warmth by way of use of insulating materials and are warranted by The Bat Conservation Trust.



One box will be placed in the eaves of the easterly facing ‘gable’ elevation of each chalet/lodge.

2. BIRDS

- 2.1 Swallow boxes will be purchased and installed on the western gable end of each shed. A typical box is shown below:



This box has been installed at various new properties in Powys and has attracted good numbers of visitors and hosted successful breeding swallows.

- 2.2 Two further boxes for tits, sparrows and robins will be built by the applicant and attached to trees outside of the application site (there are no trees on the site at present) but within the owners' property boundary. The design will be that adopted by The Wildlife Trusts and is shown below:

Box building instructions:

You will need:

- Rough cut, unplanned, untreated softwood timber, 150mm wide x 1500mm long x 15 mm thick
- Scrap rubber, such as an old inner tube from a tyre
- Galvanised 20mm (3/4") nails
- And the following tools: carpentry saw, hammer, hand brace or drill (with 25mm, 28 mm, or 38 mm diameter cutting bits), pencil and ruler, scissors for cutting rubber.

to make open-fronted 'robin box' cut along dotted line

angled cut at 45°

There are two sorts of basic nestbox - the open-fronted robin box ...

... and the hole-fronted tit box

The diameter of the entrance hole determines which birds will use the nest box

blue tit (25mm)
great tit (28mm)
sparrow (38mm)

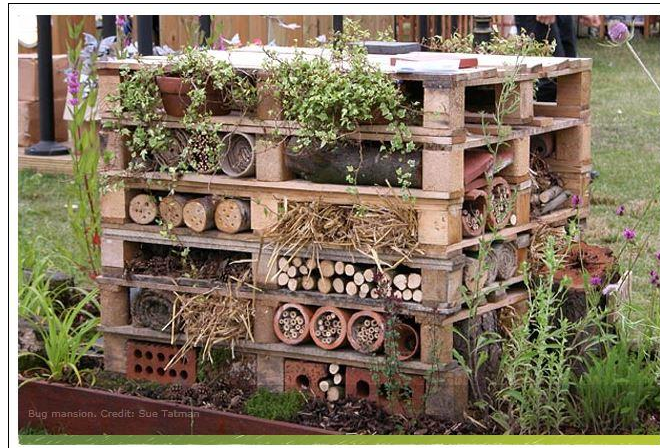
1. Marking out

Mark out the panels of the future nest box with pencil and a ruler to the dimensions shown above, and write the name of each panel onto the marked out wood (believe me, this will save confusion later.) Where possible, try to ensure that the grain will run vertically in the finished box - this will help drainage.

now turn over ...

3. ADDITIONAL BIODIVERSITY

3.1 The applicant has also committed to building 'bug hotel' in the enclosure, this consisting of a frame within which a variety of materials is held to offer sanctuary for bees and a wide variety of insects. The picture below typifies the approach though the applicant will select one of many designs recommended by experts.



Build Your Own Wild Bee Hotel!

Roof can be thatch (makuti), metal or wooden. Use local materials.

a

b

Plastic or PVC pipe

Hollow reeds or bamboo stems

Wooden block with holes drilled

Clay/sand mix held in by mesh

c

Bees are important pollinators of crops and wildflowers in our farms and gardens. You can help wild solitary bees by providing a safe nesting site for them:

(a) This is the deluxe 'Bee Hotel'. Adjust the size to your local materials. The different layers provide nesting sites for different species of bees. Place in a sheltered area where it will not be disturbed. This will provide a nesting site for many years.

(b) A simple plastic or PVC pipe packed with hollow reeds or bamboo stems of assorted sizes. Hang or tie to tree/fence

(c) Wooden block or post or old stem/trunk with holes of different sizes drilled in it. Hang or tie in a sheltered area.

Above: Leafcutter bees are some of the solitary bees that will use the Bee Hotel

For more information:
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Insect Committee of
Nature Kenya
The Kenyan Wildlife Society
Nature Kenya
Connecting nature and you

Research, writing and illustrations by Dino J. Martins

4. HEDGELINE MAINTENANCE

- 4.1 Hedgelines represent vital wildlife corridors, offering safe passage for a variety of small mammals and assisting bat movement. The applicant will maintain undercover at the base of all hedgerows bounding the site which not only enhances the value as a wildlife corridor but offers additional habitat friendly to insects.

5. TREE PLANTING

- 5.1 Three areas are designated for tree planting in locations shown on the proposed site plan, these respecting the views to and from the proposed holiday chalets/lodges.

Species

- 5.2 All plants (trees) will be sourced from a reputable nursery to establish that only stock with local provenance is selected and used. The trees proposed typically play host to significant numbers of species of birds and insects, representing a valuable food source and habitat.

Tree Species	%	No.	Height at maturity
Field Maple (<i>Acer Campestre</i>)	30	c40	Medium (10m+)
Silver Birch (<i>Betula Pendula</i>)	30	c40	Medium (10m+)
Rowan (<i>Sorbus Aucuparia</i>)	30	c40	Medium (10m+)
Crab Apple (<i>Malus Sylvestris</i>)	10	c15	Medium (7m+)

In addition, subject to the advice of the Authority, the owner is keen and prepared to purchase cider apple trees grown on M25 root stock and plant same, sourcing plants from Welsh Mountain Cider at Llanidloes and maintaining them in accordance with the Centre's recommendations. This would offer an interestin experiment while also offering a food source of considerable value for birds and insects.

Planting Principles

While the lodge is not readily visible from any publicly accessible vantage point, the Scheme looks to offer additional planting and biodiversity for the benefit of and enjoyment by visitors. Currently the site is open and used for grazing the applicant's sheep and cattle. The applicant is keen to offer interest for visitors and intends to plant and maintain three tree areas that will attract birds and pollinators as well as 'softening' the whole site.

Planting Method and Process

The trees planned (subject to approval), would be bare-rooted and planted between October and April.

Tree pits will be dug with a diameter accommodating 200% of the root systems of the trees to assist deep root growth and protect from heavy winds. The root ball will be hand planted, backfilled using hand tools and firmed in prior to heavy watering after which the area around the tree will be topped up with soil and formed in again.

Depending upon the nurseryman's advice, stakes will be placed adjacent to the trees with the trees being carefully secured against excessive rock by use of tree ties. In addition, again based upon advice, tree guards will be used to inhibit damage by rabbits or deer.

An initial treatment of 4oz of phosphate will be applied around each tree and a layer of bark will be placed around the trees as a mulch to aid water retention and suppress weed competition.

Fencing

In order to assist with viability the new tree areas would be fenced to avoid stock and large wild mammal damage, allowing 1.5 metres from the trees to avoid 'nibbling' before plants become established and the hedge matures.

Maintenance and Aftercare

Immediate maintenance

Trees will be watered regularly, avoiding overwatering, during periods when there is insufficient rainfall. Water collected in tanks from the roofs and gutters of the new build will be used to assist with sustainability, but the on site pond is a ready source of water in dry periods.

During spring, summer and autumn areas 0.5m diameter from tree trunk centres will be weeded and kept weed free.

First twelve months

Regular checks that tree stakes are not chaffing bark and adjusting tree ties as necessary. Check tree guards and uprate as appropriate

Ongoing maintenance

Any dead, dying or diseased tree will be replaced on a like-for-like basis between the October and April following any such loss.

Regular monitoring of tree condition and pruning of lower branches will be carried out to achieve good shape

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