

Biodiversity/Ecological Assessment

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GARDEN OVERALL

The main garden area is some 175 m² and this includes two parking spaces which it is assumed would be paved in a water permeable material. By an earlier arrangement of diseased tree replacement, not directly related to this application, a new tree is to be re-planted, an oak, *Quercus robur*, Confirmation by LPA

This is a highly valuable tree in the support of local biodiversity. Like other native broadleaf trees it is at its most effective in a woodland interacting with other components of forest rather than being planted as an individual garden tree.



Oak
And
Acorns

With an oak in the garden it would be advantageous to leave patches of leaves as they fall as their undersides provide invertebrate habitat attracting blackbirds to hunt for spiders etc as they turn the leaves with their beaks.

ADDITIONAL TREE PLANTING

Instead of other broadleaf trees being considered for planting one of a small range of fruit trees e.g. apple, or plum should be planted instead. Pear trees could be chosen instead but will need pollination from a different cultivar either in this garden or close by.



Plum
Victoria

Apart from the modest amenity value such trees would have two distinct advantages in assisting local biodiversity. In spring flowering of blossom would provide pollination opportunities for range of insects and later in the year the fruit body falling from the tree to provide food opportunities for ground feeding birds and opportunities for invertebrates.



Apple
Blossom

Apple tree cultivar selection is very wide but *Laxton's Fortune* AGM or *Egremont Russet* AGM are easy to grow and provide a good crop and abundant pollination opportunities. A feathered maiden or two year old tree is recommended for planting.



Russet

The location for such planting would be to the north end of this garden in a semi sheltered but sunny location with a reasonable prospect of sufficient soil and subsoil moisture throughout the year.

Closer to the dwelling towards the southern would provide a suitable location for two semi dwarf plum trees growing to no more 3-4 M in height overall when mature. *Plum Victoria* grows slowly so a location closer to the new dwelling would be appropriate.

BOUNDARIES HEDGES

Garden boundary detailing can be an important resource in the sustaining of garden biodiversity. Hedges especially form wildlife pathways, shelter from predators, living habitats and food. However it is also appreciated that a clear visual boundary is strongly preferred between the existing garden and this proposed new dwelling and a 2M close boarded fence and a smaller area of facing brickwork is very desirable for the private use of such an outdoor space between dwellings.



Beech Summer

However for smaller animals, including those that move through garden areas nocturnally, a reasonable area or length of permeable movement permitting hedge planting is desirable. To assist its value the use of a plant variety that attracts wildlife would be a helpful choice.



Beech Winter

Beech makes a good hedge plant, and it is native to South East England (including this area). The foliage is eaten by caterpillars of moths. The seeds are eaten by mice, voles, squirrels and birds.

For the householder the advantage is that the hedge will retain its leaves over winter. It is recommended therefore that the boundary to the driveway be planted with this hedge of some 22 linear metres with a break for car parking access. Currently much is planted with Privet.



Alder

A smaller patch of the Alder hedging plant *Alnus glutinosa* can be also placed at the north end of the garden screening in front of an existing fence. It is native, is fast growing and wet ground tolerant and is a good habitat for butterflies, birds and moths as well as many insect species. It can be mixed with other native species. Alder does lose its leaves in winter however so Beech makes a better border screen.

BRICKWORK

The new brickwork can include holes specifically drilled in the drying mortar to accommodate masonry bees

ACCESS DRIVEWAY HABITAT

The driveway above the location of the proposed dwelling has an area of natural planting of some 120 M², it is generally 2M wide tapering to around 1.5M in width. Owing to the original profile as cut

through the land contour there is a constant but modest seepage of ground water into this natural planted area that keeps the surface moist.

This location can provide a hibernation habitat for frogs and toads. Ground surface can be scraped away in a saucer shaped depression up to 5 cms deep tapering and fill partly with stones and small logs, leaving voids. The excavated soil can be spread over the depression leaving access ways into the void areas between the stones

In addition clay plant pots with the rim partially cut away placed in the ground cover is a good and easy addition to the scoop and rocks



Frogs
And
Toads

INVERTEBRATE HABITAT

Apart from planting suitable garden plants that flower at different times over the seasons, creating an artificial habitat for invertebrates may be considered .

Owing to the tidiness of many gardens in the 2020s artificial habitats for invertebrate creatures are becoming more popular. They are often called Bug Hotels.

The northern end of this garden facing south would be an ideal location for creating an artificial habitat for a variety of invertebrate creatures as it is sunny and reasonably well sheltered. The infills should be a variety of materials, tree bark, deadwood, hollow plant stems, straw, etc. There are a wide variety of media and materials that can be used to create such an artificial habitat.

The overall structure can be timber and it is an advantage to have a waterproof covering as a roof over it to prevent rainwater percolating through the individual habitats. This can be combined with an area of garden left in an uncultivated or messy condition with fallen leaves from the oak tree. Here the overall growth can be trimmed back once annually.

It should be noted that there are some rules when erecting these artificial 'homes' and that the combination of offered habitats should try and ensure by design that one species is not directly provided as the food for another.

For example if mice are able to access it the invertebrate inhabitants should have adequate length or depth of habitat and be of the right cross sectional area.



Bug
Hotel

Masonry bees for example are offered other habitats in new masonry walling.

CONCLUSION

For a family occupying this house the garden is also an important resource for the adults to sit in on a pleasant summer evening and a play area for children.

Indeed this LPA requires at least a 10 metre long rear garden.

There will be a loss of some existing soft landscaping but to mitigate this, the proposals here included would not materially impinge on the main garden open space but would utilise the perimeter to provide zone of habitation and feeding opportunities for the natural wildlife of the area.

Doug England
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