

Habitat Network

The proposed planting aims to make connections between and enhance existing wildlife habitats whilst being mindful of retaining habitats that currently work well for important species, such as song thrush. The woodland area to the north-west of the site adjacent to the Sweet Walk will be retained and managed as song thrush habitat. Similarly, two areas of the southern Woodland Quarters surrounding Marble Hill House will be protected with new fences and hedging to preserve the internal area of habitat, as noted in item 4 on the opposite diagram. These areas will under-go a longer term process of woodland management to ensure habitats are retained and undisturbed so wildlife can adapt whilst other areas of new tree and understorey planting establishes.

The expanded areas of tree planting and understorey tall grassland to the perimeter of the park and between the Pleasure Ground avenues will provide wider and better connected flight paths for commuting bats. The species-rich grassland below will also attract a greater number of insects, providing enhanced foraging potential for bats and birds. This will also benefit mammals such as badgers, hedgehogs and mice, the latter of which will attract larger birds of prey to the park, such as tawny owl, known to nest in Marble Hill Park.

In the northern Woodland Quarters the habitat will be diversified with the re-introduction of shrub understorey and nectar-rich ground flora into the areas of thicket and providing new areas of grove trees with meadow understorey. The flower-rich meadows will attract a wider range of pollinating insects such as bees, butterflies and hoverflies, providing a food source for birds which can seek cover in the adjacent dense thicket.

The dense nature of the thickets also offer the opportunity to include dead wood habitats where they are less likely to be disturbed; an important habitat for attracting stag beetles.

- KEY:
- Existing Woodland and inear tree corridors
 - Proposed thicket planting below existing trees
 - Areas of Woodland Quarter with no works proposed as part of this application
 - New Orchard and Grove trees with meadow understorey
- 01 Expanded tree planting and tall grassland understorey to provide connected bat foraging routes and larger areas of cover for wildlife commuting and foraging
 - 02 New avenue tree planting to connect bat foraging routes
 - 03 Existing area of woodland and known song thrush habitat to remain unchanged
 - 04 Area of Woodland Quarter to remain unchanged to retain existing habitats and undergo a longer-term programme of woodland management
 - 05 Proposed areas of understorey shrub and groundcover planting below existing trees, with new tree inter-planting
 - 06 Proposed areas of new grove tree planting with meadow understorey
 - 07 Proposed area of new orchard tree planting with meadow understorey
 - 08 Proposed Flower Garden with shrub and herbaceous perennial planting



Diagram of proposed habitat network



3.8 TREE PLANTING PALETTE

New tree planting and species selection aims to re-interpret the historic structure of the c.1749 plan, although where once it is thought avenues of Horse Chestnut would have been planted, the proposals are mindful of contemporary biosecurity issues and climate change adaptation. More appropriate species have been selected which, although may not be true to what was planted historically, still invoke the spirit and structure of the historic landscape design.

Many of the proposed tree species comprise native species or those with known wildlife value producing a variety of fruits and flowers. Elms, including wych elm, english elm and the Dutch Elm Disease-resistant varieties of *Ulmus* hybrids, will be utilised to support the Priority Species of butterfly the white-letter hairstreak, who's caterpillars feed on elms. The new tree avenues running north-south in the Pleasure Grounds will encourage new bat flight lines and sheltered foraging opportunities. Further tree planting is proposed within the extended bands of semi-improved grassland in the East Meadow.



Alnus glutinosa HE
Alder WQ



Betula nigra HE
Black birch WQ



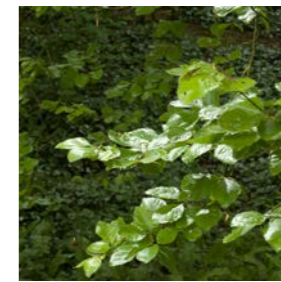
Betula pendula HE
Silver birch WQ



Carpinus betulus HE
Hornbeam WQ



Corylus avellana HE
Hazel WQ



Fagus sylvatica HE
Beech WQ



Maloideae WQ
Apple sub family



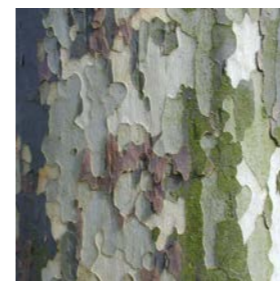
Malus spp WQ
Apple



Malus sylvestris WQ
Crab apple



Pinus sylvestris WQ
Scots pine
Evergreen



Platanus x hispanica WQ
London plane



Populus tremula SW
Aspen



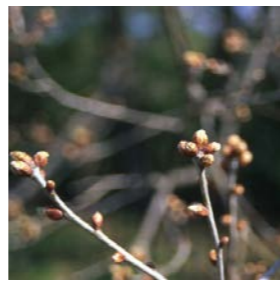
Prunus avium HE
Wild cherry WQ



Prunus padus HE
Bird cherry WQ



Quercus ilex WQ
Holm Oak
Evergreen



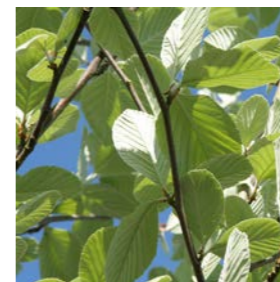
Quercus robur AV
English oak SW



Robinia pseudoacacia SW
False acacia



Salix pentandra SW
Bay willow



Sorbus aria HE
Whitebeam WQ



Sorbus aucuparia HE
Mountain ash WQ



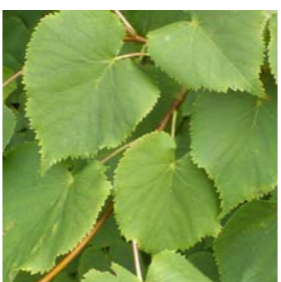
Sorbus intermedia HE
Swedish whitebeam WQ



Taxus baccata SW
Yew WQ
Evergreen



Tilia x europaea AV
Common lime SW
WQ



Tilia cordata GR
Small leafed lime WQ



Ulmus lutece AV
Elm SW

Site location key

AV - Avenues

HE - Habitat edges

SW - Sweet Walk

WQ - Woodland Quarters (Orchard, Palisade & Specimen trees)

GR - Groves