



## Little Chalfont Nature Park Trees, Plants & Wildlife

### 1. Introduction

The Park offers a range of habitats each of which supports a variety of flora and fauna for visitors to study.

What to look for:

- **Botany**; there are many examples of trees, flowers and grasses including some rare plants such as wild daffodils. Use the photographic collections to aid your observations, record sightings of flowering or perhaps a new plant not observed before.
- **Zoology**; there is also a wide range of fauna – of invertebrates (mini-beasts), reptiles, mammals and birds. Use the databases and photographic collections to aid your observations – record sightings, look for seasonal visitors, perhaps, you can be the first to see a new species not sighted in the Park before.

### 2. Grassland

Unimproved grassland is now very rare in England because of intensive farming methods, ploughing, fertilizers and pesticides. It's estimated that the UK has lost 80% of its chalk grassland over the last 60 years. In scientific terms it is classified as Mesotrophic Grassland 5 (MG5). Whilst it is naturally occurring, it requires some human intervention to maintain it – once a year it needs to be mown and the mown grass removed – it is valuable for animal feed and bedding. As a meadow, this grassland is rich in many types of grasses and wild flowers.

Cutting the grass short each year after flowering allows the seeds to set and fall to the ground, and gives light and space for new growth. Without mowing, the grass grows longer, stifles the flowers and shorter grasses and eventually only coarse grasses flourish, eventually leading to the growth of bushes and scrubland, eventually to full grown trees returning to woodland.



*i - Yellow Rattle*

#### Botany

Shorter grass allows meadow flowers to flourish, this is an ideal place to explore and observe a once common habitat for plants that have often been forced to the verges of roads and small pockets in the corners or strips on field margins. Grasses seen in the Park are recorded in the Resources D. The abundance of Pignut (*Conopodium majus*) in the Park is remarkable and small patches of Meadow Foxtail grass (*Alopecurus pratensis*) are very rare in the South of England. Yellow Rattle (*Rhinanthus minor*)



can also be found. The long ungrazed history of the site may have competed out some of the grass species usually found in mesotrophic grassland and they may return. Species noted on similar grassland nationally not recorded so far such as Common Adder's-Tongue (*Ophioglossum vulgatum*) and Pepper Saxifrage (*Silaum silaus*) may have been overlooked and it is worth looking for them or they may return as the grass is mown more consistently with the removal of many of the bushes and brambles.



*ii - Pignut*

### Zoology



*iii - Marbled White Butterfly*

Shorter grass provides more light for plants to grow and therefore more homes for the insects and mini-beasts that live on them. There is less cover for larger mammals, but it makes it easier for smaller mammals to move around and find paths through the grasses. Shorter grass makes for different seeds to grow and set and eat with more access to the soil for ground feeding birds. Birds of prey like owls gain a better sight of their prey. The grass also provides cover and moisture retention essential for reptiles including grass snakes, and amphibians such as frogs, newts and toads that need to keep their skins moist.

### 3. Woodland

Along the northern edge of the park alongside the road to Dr Challoner's High School is an area of natural woodland, a part of ancient largely natural woodland called Snell's Wood. Natural woodland like this was a valuable source of food for domestic animals such as pigs, firewood, and timber for construction, furniture and wooden tools. It is largely natural but there are some imported trees within the wood and some earthworks - an old boundary bank, track and pits for chalk or clay.

Trees are the 'lungs' of the park, carbon dioxide (CO<sub>2</sub>) is fixed in trees and vegetation through photosynthesis with some oxygen (O<sub>2</sub>) retained and any excess to the tree's own needs is emitted, trees also lower temperatures locally by transpiring water and shading surfaces and they provide shelter from the wind. Any walker in the park will feel the sensory difference between the atmosphere out on the grassland and inside the woodland.



*iv - Oak Leaf*



### **Botany**

Trees can block a great deal of the natural sunlight – they create a microclimate, cooler, damper and richer in oxygen than in open country. Some have very dense canopies like beech and leave little that can grow on the woodland floor, some such as oak allow more light to penetrate through the canopy and this supports the growth of more shrubs, bushes and flowers like bluebells. Trees create a climate that supports the growth of a wide range of fungi, mosses and lichens.

### **Zoology**



*v - Birdbox*

Trees such as oaks support a very large variety of different insects in their leaves and bark. There are many to record in the Park but we do know there will be a lot to go for. Academic studies show that 284 different insects have been found on oaks in the UK, and many on other trees but in much lower numbers beech - 64 species, hornbeam - 28 species and ash – 41 species.

### **Marshland**

There are no streams or water courses in the Nature Park, but in the grassland and woodland, there are seasonal pools or marshy area with damp conditions particularly in winter that dry out in the summer. They may once have been clay pits or farm pond that has silted up and may potentially attract moisture loving creatures like frogs and newts and plants like marsh grasses and reeds.

### **Botany**

There are some wet loving plants – some grasses visible all year round in the marshy area in part of the grassland

### **Zoology**

Wet areas naturally attract moisture loving fauna, and a reptile, a grass snake has been observed in the Park. It may be expected that amphibians such as frogs, toads and newts, will visit or take up residence. There are a range of different species in the UK and it will be interesting to see how many of these will be found in the park. For the observant visitor there is the opportunity to be the first to record these.