

## Highlights of FBHP Butterfly walks with May Webber

Butterflies and moths, collectively known as lepidoptera which means scaled wings. There are about 60 resident species of butterfly in the UK, so it's an interesting and easy group of insects to learn about. Approximately 30 of these species have been spotted in and around London with many of them appearing in Bushy Park. It is a fantastic place for them because of the different habitats such as long grass, meadow or woodland areas. Some species are very habitat specific as the caterpillars feed on one type of plant and can struggle when that is not available. Whilst others are generalist and feed across a range of plants, for example the Meadow Brown butterfly (spotted on our walk) lays their eggs across a range of grasses, and all therefore more widely distributed. Compare this with a rarer butterfly that lives in the top of oak trees called the Purple Hairstreak butterfly. They congregate over the top of one particular champion tree to find a suitable mate. The female then lays her eggs on the top of oak leaf buds, and they can possibly overwinter at this stage.

On the day of our walk, it was not overly warm, slightly rainy with wind. Butterflies prefer warm and less windy conditions and will therefore rest in the grass until conditions change. They also need a food source, and many flowers don't produce nectar when the sun isn't out or if it is too dry. They will also hibernate in various forms over the winter, normally as an adult, or possibly as a chrysalis or a caterpillar or even as an egg, depending on the species. Butterflies can live for different lengths of time, if they overwinter as an adult they could live for months like the Brimstone butterfly, or just a few weeks! We all know that butterflies have very different looking life stages. Experts think that this is, so their young do not compete with the adults for the same resources. Typically, caterpillars have teeth or mandibles to chew and butterflies feed of nectar with their proboscis (long snout).

Butterflies are a very important pollinator, like bees and we should be thinking about preserving the food that is important to them, for example the Peacock butterfly and the small Tortoiseshell feed on stinging nettles. We should leave patches of them uncut along with long grass. Finding the food of the butterflies is a good way to spot them. On our walk we found Skipper butterflies resting and feeding on the yellow flowers that look like dandelions but are called hawk bit. Another good food source are brambles, which is good for Gatekeeper butterflies or the creeping thistles where you can find marble white butterflies. Many of the flowers which attract nectar feeders have patterns on them which only show under UV light. Like most insects, butterflies have a compound eye, which is made up of numerous different lenses and can see the pattern leading them to the nectar.

Butterflies are good indicators for healthy habitats and the impact from climate change can be seen by observing the changing populations we find in the UK. We also have migrant butterflies which visit the UK from more tropical countries. For example, the painted lady migrates all the way from North Africa. This happens over generations of the butterflies, but each butterfly is capable of flying a long way like over the English Channel. As conditions get warmer, we will have new species finding their way to the UK.

There are many more moth species, around 2,500 in the UK. Moths don't get good PR and it would be good to put the record straight. Only 2 moth species feed on natural fibres which cause holes in our clothes. Plus, many people think moths are dull, but we saw some wonderful colourful species on our walk. For example, we saw a White Ermine moth, in fact two different mating pairs, so called by as they look like they are wearing a Ermine robe like a member of aristocracy. They are active at night and are sleepy in the daytime and we found them wrapped around the grass stem. Their main predator are bats and therefore didn't seem to be scared of us looking at them. Mother Shipton moth was also found which has distinctive pattern which looks like chinese characters when looked at from the side. We found at least five Forester Moths which are beautiful iridescent green. This




was the first time May herself had seen one of these. Their caterpillars feed on Sorrel which we find on the ant hills in Bushy Park. May thought we found this concentration of moths as they had just emerged in the adult stage.









We also saw an array of other interesting insects. The Nursery web spider was found in the long grass. She makes a protective tent like web around her young and has been shown to provide maternal care for her egg sack or spiderlings, even defending them if required. We also saw the funnel web spiders. Their webs spread out across the grass leading to a hole where they will wait for prey.

We saw a few parasitic wasps on the hard soil made by people walking along the paths. These human created paths or desire lines could be seen as an issue as they stop important vegetation from growing, but in themselves they form a unique habitat for some wasp and solitary bee species. You see their holes in the soil and these are the entrance to their nesting chambers under the ground. The parasitic wasps stalk and sting their pray and put them in the nesting chambers where they then lay one of their eggs. The solitary bees (mining bees) bury their eggs 10-20 cm down into the soil with pollen and nectar, so when the larvae hatch, they have a food source. She lays females eggs first at the bottom chambers, the males are laid above and will hatch first and go off, followed by the females. The males then wait for females to emerge from other chambers to mate with them. Tawny mining bees, live in grass, and create a volcano looking entrance to their nests, with raised soils. Take a look at the holes in the paths around Bushy Park and you will be amazed. There are 270 species of bee and only one is the honeybee. It's trendy to keep honeybees and they are now out competing the wild bees as there is only so much vegetation and nectar to go around.

I would encourage you to go out to find butterflies this summer and try and identify them. You can use the easy identification sheet available from the butterfly conservation council or The Field Studies council have a good guide to help you identify these and this is available in the Visitor centre in Bushy Park. Butterflies bask to warm themselves with their wings open, as they need to warm their muscles in order to fly. However, they often have them closed to camouflage themselves, so you need to look at the patterns on the outside and the inside on their wings to get a good identification. The skipper however, has a unique way of folding their wings, which look a bit like a small harrier jump get. To help identify your butterflies you need to look at the habitat you found them in. Some of them can look very similar but they will come from different environments E.g. the common blue which likes grasslands and the holly blue which likes gardens and bushes.

**Butterfly and moth Species spotted on our walk:**

		
<p>Meadow Brown</p>	<p><b>Skipper</b> (small or essex)</p>	<p>Ermine moths – mating !!</p>

		
<p><b>Forester Moth</b></p>	<p><b>Mother Shipton Moth</b></p>	<p><b>Green silver line moth – not fully formed</b></p>
<p><b>Other Insects</b></p>		
		
<p>Parasitic Wasp nesting chambers under ground</p>	<p>Digger wasp – hunts small mining bees</p>	<p>Robber Fly – steals prey from parasitic wasps</p>
		
<p>Mining Bee</p>	<p>Soldier Beetle</p>	

Many thanks to Diana Loffler and Charlie for help with the photos.

Plus other species saw:

Grass veneer moth

Straw dot moth

Green Oak Tortrix moth - micro moth

Leaf minor moth – micromoth

Ant hills and yellow meadow ants

Nursery spider with her young

Tunnel web spider

Grasshoppers

Bush Cricket

Lace wing

Dung beetle