Askham Bog trip August 2024 Wild Things u3a

Fen Bog is a flagship YWT reserve near York in a constant battle from threats of encroachment by humans, including from developers and landfill sites. Visitors like us are well-served by a boardwalk which circles the main bog areas and a pond, and today the several benches gave ten of us respite from the heat. The bog is a survivor from a glacial lake penned between two moraines, which has been exploited in the past for peat and is now an SSSI known for its diversity of habitats.

The assemblage of water-loving fen plants around the bog includes the scarce Royal Fern and plenty of Purple and Yellow Loosestrife for insect food. We found two insect species that are real specialists today: a caterpillar of the Loosestrife Sawfly, *Monostegia abdominalis*, which mainly feeds on Yellow Loosestrife, and the Loosestrife Weevil, *Nanophyes marmoratus,* which feeds and breeds on the Purple Loosestrife. These plants would once have been very common in our area but extensive drainage and intensive agriculture has wiped out most of the natural colonies except around remnant protected areas such as the Leven Canal.

Left: Loosestrife sawfly caterpillar and, below, the Loosestrife Weevils.

(Sawflies are in the order Hymenoptera. They are stingless, don't have the narrow waists of their close relatives wasps and ants, and their ovipositors are adapted to saw into plant material to lay their eggs, hence the name. You can distinguish sawfly larvae from butterfly and moth caterpillars as they have 6 or more pairs of 'prolegs' at the back of their bodies as well as three pairs of 'true legs' at the front. Butterflies and moths have five or less.)

Denise and I had great fun today gall-hunting on the numerous small oaks which grow here, whose leaves are accessible. We found five different types of leaf gall on the oaks, all of which are caused by different cynipid wasps. These have a strange and rather mind-boggling life cycle.

Each of the gall-forming wasps has a sexual and asexual stage, so two stages in a one-year cycle, each producing different adult forms, and each stage producing different galls, often on different parts of the tree. Male and females generally emerge in spring to mate and the female lays an egg, in our case today on the leaves. It's the larva that causes the gall to form when it emerges, taking over the DNA of the plant material around it to form a distinctive gall, for protection and food. When the females emerge (only females in this generation) they will lay eggs which will form the next sexual generation.

To make matters stranger, the larger oak galls will often contain 'inquilines', other invertebrates which live in the galls usually without causing harm to the gall causers, but sometimes starving them. Another class are the 'parasitoids', again usually wasps, this time chalcid wasps. Chalcid wasps are tiny but beautifully metallic and deadly, the females with long ovipositors to insert their eggs into the bodies of the hosts, to consume them from within. And there are even 'hyperparasitoids', which parasitise the parasitoids …

If that's all too much, just enjoy the gall-hunt photos and try it for yourself. All you do is find an oak tree and turn the leaves over.

Page 2: Oak Pea Gall *Cynips divisa*; This page clockwise from top: Cherry Gall *Cynips quercusfolii* ; Oyster Gall *Neuroterus anthracinus* ; Common Spangle Gall and Silk Button Spangle Galls *Neuroterus quercusbaccarum* and *Neuroterus numismalis* (left and right on the leaves in bottom picture). Note the gall names are those of the gall causer creatures.

Left: Candy-stripe spider *Enoplognatha obtuse sensu lato* with its egg case.

Below: two galls on Meadowsweet found by Denise. The top two are *Dasineura pustulans* and the bottom are *Dasineura ulmaria*, both caused by midges.

Above: Wild Angelica, below: a Roe Deer leaps through the bog

Above: Ragged Robin, one of the most attractive of the plants around the bog.

Next page: a male Scorpion Fly *Panorpa communis* with its sting-shaped tail which is in fact a clasper for mating. Below is a saddleback Harvestman, *Mitopus morio,*

Above: a Metellina Spider.

Below left; a Ruddy Darter by the pond; below: Sharp-tailed Hoverfly on Angelica, the most common species of hoverfly there today.

Report: HK, photos: Helen and Denise.