

Only white butterfly truly resident in Park's grassland

Text and photos by Piers Eley



The Green-veined White, *Artogeia napi*, is the only member of the family of white butterflies, the Pieridae, that is truly resident in the acid grassland of Richmond Park and, as such, deserves to be better known. It is a quite small, beautifully marked white butterfly, not quite as large as the smaller of our two "Cabbage Whites": the Small White, *Artogeia rapae*; but larger than the more dramatically marked Orange-tip *Anthocharis cardamines*, to which it is closely related. Both of these are also regular visitors here.

It is of course only the male Orange-tip that sports the striking orange tips to its wings that give it its name. The topside of the female Orange-tip's wings are almost pure white, very like the wings of the male Green-veined White, but with larger and more distinct black markings.

On the right are a female Orange-tip and a male Green-veined White. It is not surprising that these butterflies are so similar, as the caterpillars of both species live on Crucifers, plants related to Water-cress. In our area,



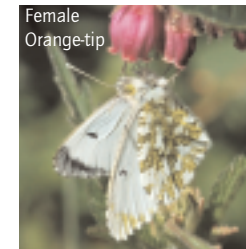
Orange-tips strongly favour Garlic Mustard (*Alliaria petiolata*), while Green-veined Whites prefer Cuckoo Flower/Lady's Smock (*Cardamine pratensis*). Garlic Mustard, which is also a preferred source of nectar for the Orange-tip butterfly, is a rarity in the Park,



though very common immediately outside its walls, presumably because it is a favourite snack for the deer. So, while Orange-tips breed along the river and along the outside edges of the Park, I have yet to find them breeding in the Park and, if they do, it will almost certainly be along one of these edges or inside an enclosure, where it is safe from the deer!

Cuckoo Flower or Lady's Smock, on the other hand, is the pretty pinky-white flower that you will see in small quantities beside every pond and ditch in the Park, ideally placed for the Green-veined White, which likes a damp environment. The Green-veined White also lays its eggs on the related Wavy Bittercress (*Cardamine flexuosa*) which is a common plant in the same damp areas of the Park.

The easiest way to distinguish between these two small white butterflies, and the Small White itself, is by looking at their underwings. The underside of the Orange-tip's wings has a complicated pattern of green hatching, with an orange overtone. The Green-veined White (above centre), has smoky black or dark-green



markings along the veins of its underwing, with a more or less yellowish background colour. The Small White has a stronger yellow background, often with a dusting of grey on top, but no colouration of the veins and no hatch-marks.

Both the Small White and the Large White, which is similar but much larger, are strong, fast fliers that one sees flying rapidly across the Park, from one vegetable garden to another, with only a very occasional stop to sup nectar from some flower – brambles are a favourite.

The Green-veined White by contrast has a weaker more fluttering flight and, especially in the case of the female, is constantly stopping to investigate the plants over which it is passing, in search of suitable hosts for its eggs, which are laid singly. It is one of our earlier butterflies, with the first brood emerging from hibernating chrysalises in April and May. The eggs laid by this brood form thin-shelled chrysalises, not designed to over-winter, from which the second brood will emerge in July/August.

Look out for these beautiful butterflies in the damper shaded areas along the edges of grass and woodlands and along stream-beds. On the left, as a farewell gesture, is a photograph I took in early May of a newly-emerged male Green-veined White on a Dandelion by Conduit Stream in the North West corner of the Park. Good Hunting!

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