

The Butterflies of LONDON



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Leslie Williams

London, at first glance, may not appear an obvious home for butterflies. But of the species considered resident or regular migrants to Britain and Ireland, two-thirds were found to occur in London. This book, based on a London-wide survey by the London Natural History Society and others, illustrates the range of habitats within the UK's capital city, the butterflies that it supports and the potential to enhance the city environment. Photographs illustrate the butterflies in their habitats throughout London.

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Orange-tip, male, at Petersham Lodge Wood, Richmond, Mick Masie

Orange-tip *Anthocharis cardamines*

In flight, the male Orange-tip, as the name suggests, is one of the most easily recognisable of British butterflies in the spring, due to the orange on the tips of the white upper forewings. Orange is a warning to predators, for the butterfly contains oils similar to mustard that the caterpillar accumulated while feeding from its foodplants. The female is more sedentary and less conspicuous with grey colouration to the upper forewings, which at a distance can confuse identification with other white butterflies. At rest, both sexes draw their forewings under their hindwings, which have a pattern of white with mottled patches of yellow, green, grey and black, providing camouflage when roosting on the flower-heads of plants.

In London the Orange-tip is widespread, though occurs in low numbers at any location. It uses hedges, watercourses and other linear features to travel far in search of larval and adult foodplants.

HABITAT

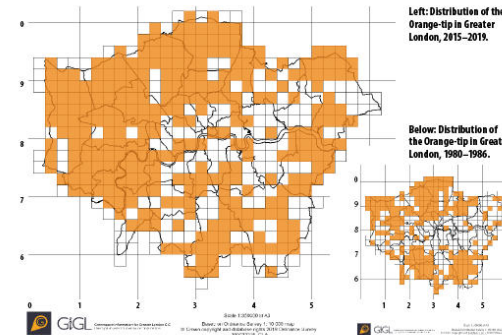
The Orange-tip is wide ranging, seeking damp



Orange-tip male at Greenwich, Joe Seale

grassland in meadows, gardens, at the margins of streams, rivers and canals, on woodland edges, glades and rides, and on roadside verges where its larval foodplants grow.

The larval foodplants are Cuckooflower, which occurs in damp grasslands particularly



Left: Distribution of the Orange-tip in Greater London, 2015–2019.

Below: Distribution of the Orange-tip in Greater London, 1980–1986.

on clay soils, or Garlic Mustard in the edges of hedgerows. Hedge Mustard, Charlock and other plants of the Brassicaceae family may also be used. Those plants are also amongst sources of nectar for feeding, while plants used for roosting include Garlic Mustard and Cow Parsley.

LIFE CYCLE

The Orange-tip has one or, exceptionally, two generations a year. The adult butterflies usually emerge from the pupa from late April, with the main flight period from May to early June. Occasionally, butterflies may be seen as early as late March or as late as July.

For egg-laying, plants that are relatively unshaded are preferred. As each plant can support one larva; only one egg is laid per plant.

Apparently, the egg-laying female can sense a chemical released by eggs laid previously to avoid laying a second egg on an individual plant. Similarly, single, isolated plants are preferred, rather than a clump of plants. Eggs are laid on the underside of the flower buds, and the larva feeds upon the developing seed-pods of the plant. Upon hatching, the larva eats the developing seed-pods. The larva leaves the foodplant to find shrubs in a hedge or other

structure to pupate and overwinter. This is probably crucial, as meadows could be prone to cutting, harvesting, grazing or, in winter, to seasonal flooding. The butterfly emerges from the pupa in the following spring.

DISTRIBUTION

The Orange-tip was found to be widespread in London, though with a patchy distribution. Fewer records from central and urban areas of London are as expected for a species associated with damp grassland and hedgerow edges. The apparent sparser distribution in the eastern parts of Greater London could be in part due to under-recording, though the recorded distribution for 1980–1986 also indicated a reduced presence in that area.

The Orange-tip appears more widely distributed in London at the local level than during the early 1980s. However, the flight season is short, and in interpreting change for this species there is the possibility of relative under-recording in one of the surveys and of differences in local recording.

The Orange-tip can be observed in England, Wales and parts of Scotland, Ireland, Europe and Asia.



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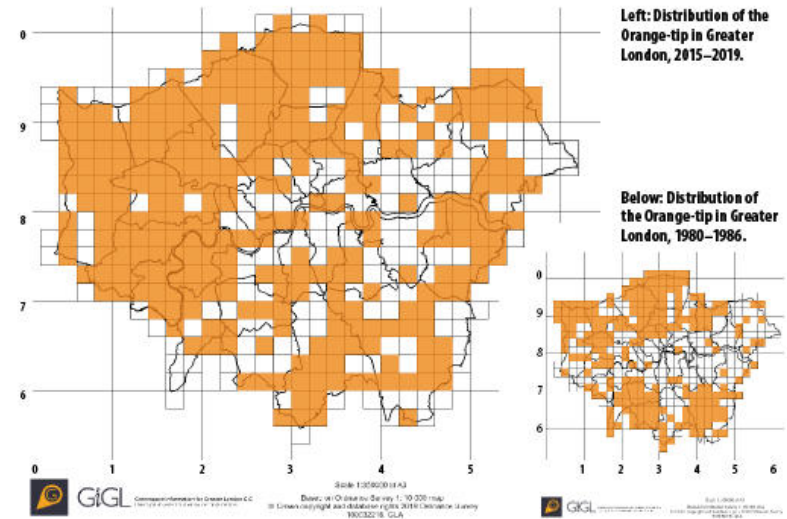
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