

Brighton & Hove City Council
Arboricultural Information Note No. 10

Winter Moth
(Operophtera brumata)



Winter moth is aptly named: the adults emerge from November to mid-January. It is one of several moths that are active during the autumn to spring period.



In many of these 'cold weather' moths, the two sexes are quite different. Males have fully developed wings (above) and a typical moth-like appearance, but the females (left) are either wingless or have greatly reduced wings, making them incapable of flight.

Winter moths emerge on mild evenings from pupae in the soil. While the drab, greyish-brown males can fly about, the females have to crawl up the trunks and along the branches of trees until they reach the twiggy shoots where they mate and lay their eggs. These eggs hatch in spring when the trees come into leaf. Many deciduous trees and shrubs, including oak, hornbeam, lime, sycamore, mountain ash, birch, rose, apple, plum, pear and cherry are host plants. The caterpillars are up to 20mm long and pale green with stripes along their bodies.

Winter moth caterpillars can be so abundant on oak trees that, in combination with other moth caterpillars, they cause severe defoliation in spring. The trees survive, producing new leaves in early summer as caterpillars are fully fed by late May or early June, when they move down into the soil to pupate.



Protecting trees

Winter moths can damage garden trees, especially fruit trees. Fruit growers can protect these by placing sticky grease bands on the trunks in late October. This forms a barrier against the crawling females and reduces the number of eggs laid on the twigs. Grease bands offer no protection against moths with winged females such as codling moth. However, it is these that cause small maggots in apples.

Winter moth facts

Caterpillars of winter moths and other moths are taken in huge quantities by tits and other birds when they are rearing chicks.

Male winter moths usually rest on tree trunks and other vertical surfaces with their heads uppermost. If you see one with its head down, look more closely; it is probably in the act of mating, the tip of its abdomen linked to that of a wingless female.