

**Brighton & Hove City Council**  
**Arboricultural Information Note No. 8**

**Horse Chestnut Scale**  
*(Pulvinaria regalis)*



While this scale insect is commonly named after its known presence on Chestnut, it is equally at home colonising Lime, Sycamore and Maples, Magnolia, Bay and other ornamental trees.

First noticed in London Boroughs in the 1960s, this insect has migrated swiftly in the south of England where it is now common and is known to be prolific as far as Yorkshire and Lancashire. The Scale thrives on trees in situations enjoying warm microclimates such as those growing in roadside pavements on major vehicular routes, paved squares, car parks, parks, and naturalised woodland.

The Horse Chestnut Scale is often mistaken for a fungal infection, but each dark brown shield-shaped structure, surrounded by a white waxy wool-like mass some 4mm across, serves as a shelter for fully developed scales (adult insects), immature scales, known as nymphs, and a clutch of white eggs. These structures are most noticeable in early summer, deposited on the bark of the main trunk and often extending into the branches of the lower canopy. Each of the dark, shield-shaped outer covers are constructed of Chitin (a hard, horny constituent of the bodies of some insects) and are actually the dead bodies of the egg laying females.

The eggs hatch in late June or July with the newly emerged nymphs moving onto the foliage where they begin to suck sap from the undersides of the leaves. Prior to the autumn leaf fall, the still immature scale insects move to the branches and trunk where they over-winter. Development to adult scales is completed during spring and these commence egg laying on the bark in late April into May. The adult scales are parthenogenic, a characteristic common in many lower forms of insects, providing the ability to reproduce without fertilisation being necessary.

Infestations of the Horse Chestnut Scale, while unsightly and possibly visually alarming, have little or no detrimental effect on the health or vigour of the colonised trees, therefore control is not necessary. However, on young, easily accessed trees it is feasible to scrape the mature scales and egg mass from the trunk and branches using a stiff brush. These should be targeted in April and May and such action will stop the next generation from developing.

The spraying of chemicals to control the problem on larger trees is not recommended as the range of chemicals available to effect control is limited and non-selective, and the equipment necessary to introduce these are specialist in nature. As the problem is purely visual, chemical treatment is not recommended under any circumstances.