

Elm Leaf Beetle Info for City of Burnside Website

Elm Leaf Beetle (ELB) was accidentally introduced into Australia in the late 1980s, only recently (the last few years) has it established itself in South Australia and across Adelaide's Elm tree population. Both the adult and the larval stage of ELB feed on Elm trees and can cause complete defoliation of a large Elm tree in the course of a single summer.

Why is it a pest?

ELB can cause unsightly damage to Elm Trees as a result of the adult beetles and larvae feeding on the leaves. Repeated seasonal defoliation can cause a decline in tree health, reduced growth and an increased susceptibility to environmental stresses.

How do I identify the beetle?

The adult beetle is about 6mm long, yellowish to olive green with a black stripe along each side of the back. The larvae are about 12mm long, green to yellow, black head and two black stripes on the back and the Pupae are about 6mm long and bright orange-yellow.

When and how should I control the pest?

Pest control is best undertaken in late winter through spring to minimise defoliation. Effective control methods include soil and trunk injection.

How does the beetle damage elm trees?

Adults (beetles) spend the winter in sheltered places to emerge in spring and feed on leaves creating 'Shot Hole' damage. Females lay their eggs on the underside of leaves and when they hatch, the larvae destroy all but the veins of the leaves, creating a 'skeleton' effect. When they are mature, they crawl down the trunk, where they collect beneath mulch and ground cover and transform to their pupa stage. They emerge as beetles, mate and fly to the leaves to deposit eggs just like their parent, which marks the beginning of the second generation. These new larvae feed, then crawl down the trunk when mature, to emerge as the second batch of beetles in December.

Elm leaf beetle is a serious defoliator of elms. Larvae skeletonize the leaf surface, while adults chew entirely through the leaf, often in a shot hole pattern. Defoliation eliminates summer shade, reduces the aesthetic value of trees, and causes annoying leaf drop. Repeated, extensive defoliation weakens elms, causing trees to decline

How is the City of Burnside preventing damage caused by Elm Leaf Beetle?

Best management techniques for the control of elm leaf beetle should ideally utilise an integrated program that incorporates good cultural practices, conservation of natural enemies, regular monitoring and the use of less-toxic insecticides.

During October, Council's arboriculture department will be trialing two control methods among its elm tree population in Prescott Terrace and Alexandra Avenue, Rose Park. The first control method will be used to treat mature trees and includes injecting the stem with a systemic insecticide that is sent to the tree's leaves, impacting the beetle and larvae as it feeds.

The second control method is aimed at the recently planted trees in the avenues and includes using slow release tablets inserted into the tree's root system. As the tablets breakdown they release the same systemic insecticide combined with a slow release fertilizer that becomes available to tree roots in the vicinity. Once again the insecticide is sent to the tree's leaves, impacting the beetle and larvae as it feeds.

Once treated, Council staff will be monitoring these trees closely to ascertain the effectiveness of the treatment and whether further treatment may be required.

How can Burnside residents protect elm trees on their private property?

While the Council is treating its Elms as outlined above, it will not be performing any treatment on trees located on private land. If you suspect that an Elm tree on your property may be suffering from this pest by observing the signs and symptoms above, we recommended that you seek advice from a qualified arborist as soon as practicable and ascertain the most appropriate method of treating your tree.

