

Wood Boring Beetle Flies into the UK



Asian Longhorn Beetle.
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UK plant health authorities are battling to eradicate the most dangerous alien insect pest of trees and shrubs the United Kingdom has ever had to face. Asian longhorn beetle/ALB (*Anoplophora glabripennis* arrived), which arrived in wood packaging from China, has been breeding in trees at Paddock Wood in Kent (eight miles from Maidstone) for at least two years.

Failure to eradicate this wood boring beetle could transform large areas of the country into a lunar landscape as the authorities will be forced to fell and burn all potential host trees in its path. Most insect pests have a restricted host range but

this beetle attacks a huge range of broad-leaved trees which are already being felled and burned by contractors working with the Forestry Commission (FC) and Food and Environment Research Agency (FERA) in Kent.

Potential tree hosts include poplars, willows, maples, sycamore, London planes, beech, alders, mountain ash and all *Prunus* species. Such is the breadth of ALB's host range that conifers, Eucalyptus and English oaks are virtually the only trees escaping the 'blade' and 'burner'.

Houlbec Forestry, an approved Arboriculture Association contractor from Hastings, is felling and clearing trees and an 'air-burner' belonging to Kingwell Holdings of Braintree, Essex is incinerating 1 tonne of wood per hour on site, 12 hours a day for 7 days a week.

Infested trees plus all healthy potential host trees within a 100 m radius around each beetle infested tree are felled and incinerated.

By mid-June 65 trees with a combined total of 100 beetle larvae had been identified, felled and incinerated together with over 1300 healthy susceptible trees.

The operation began in late April 2012 and is likely to continue through summer as newly infested trees are found

further out from the original infestation. Each time another infested tree is found the infestation zone is extended by another 100 m (radius around the tree) and likewise the 'exclusion (buffer) zone' for another 200 m beyond the edge of the infestation zone. By mid-June the infestation zone covered more than 8 hectares.

Adult female beetles lay eggs in slits cut into the bark on the upper branches of trees starting in May. Larvae hatch within 7-17 days and feed under the bark through two larval moults before boring into the wood.

Once inside they excavate galleries up to 10 mm in diameter to attain a body length of 50 mm by maturity. Pupation occurs in spring and hatching adults emerge

from May through to August leaving masses of tell-tale wood shavings around the face of the exit hole.

Length of ALB life cycle varies depending on temperature. Entomologists expect ALB life cycle under south of England conditions to be around 2 years. The boring activity of beetle larvae weakens trees which collapse and die. So serious is this quarantine pest that tree felling and incineration is overriding all other normally sacrosanct priorities including Tree Preservation Orders (TPOs) and nesting birds.

Thankfully none of the three golf courses in this area of Kent are affected. Spread of ALB onto golf courses would completely change their topography and lay-out due to a mass loss of trees of all stages of growth and development.

In addition, it would undoubtedly mean significant collateral damage to sports turf from the heavy machinery and equipment needed to fell, load, transport and incinerate hundreds of full grown trees.

This insect's capacity for rapid spread is high. Adult beetles will fly at least 400 metres in search of a food supply and anyone felling or pruning an infested tree and subsequently transporting debris to a landfill or re-cycling centre will inadvertently spread the pest.

Experience from the US shows just how far and fast this beetle can spread. After arriving in New York in 1996 and Chicago in 1998, ALB subsequently spread into the New England States, Ohio and Canada. Estimates for damage and cost of control run into hundreds of billions of dollars.



Willow showing adult Asian longhorn beetle exit holes.
(Picture Forestry Commission)



Parts of Paddock Wood are beginning to look like a lunar landscape. Felled poplars shown here (Picture Forestry Commission)