Forestry Commission England

Acute Oak Decline – AOD

Acute Oak Decline (AOD) is a disease affecting several thousand native oak trees in Britain. It is considered to have first occurred in Britain 30-35 years ago. It mainly affects pedunculate oak (*Quercus robur*) and sessile oak (*Quercus petrea*), however other species of oak can also be affected.

The larval galleries of the buprestid beetle, *Agrilus biguttatus*, are usually found in association with lesions. Various species of bacteria have been isolated from these lesions. The high co-occurrence of the beetle and the bacteria suggests that these agents play a role in AOD.

KEEP IT CLEAN

Don't give pests and diseases an easy ride

If you think you have spotted this disease in a tree, then report it through the Forestry Commission's online Tree Alert form: **forestry.gov.uk/treealert**

Where possible, infected trees should be left in place, monitored and cordoned off to prevent access.

Where a limited number of trees are infected, it may be prudent to fell and destroy the infected individuals to reduce the risk of infecting nearby healthy trees and to reduce inoculum levels.

Minimise the rate of spread by practising good biosecurity.

Think kit

Avoid working on or around infected trees in wet conditions. Clean and disinfect tools and equipment, and wash and dry ropes before using them to work on another tree.

Think transport

Avoid taking vehicles and machines on to infected sites particularly when wet. Wash off any build up of soil or organic material before leaving site and disinfect any areas that have been in contact with infected material.

Think trees

If an infected tree needs to be pruned or felled, strip off the outer bark and the sapwood on site and burn it. Rapid destruction of stripped bark is recommended to prevent the possibility of spreading the disease.

Symptoms Guide: **Acute Oak Decline**

Longitudinal splits

Longitudinal splits form in the cracks between the bark plates. The splits are typically between 5 and 10cm long. They can be close to one another (10-20cm) or spaced further apart.

Stem cracks and bleeds

The bleeding patches usually become visible 1-2 metres above the ground and can extend high into the canopy. In spring, the fluid runs from the splits, down the stem and stains the bark black.

Dried bleed

At certain times of the year the bleeding will stop, leaving dry, black streaks on the stems. The dried fluid can cake or form a crust around the split.

Note: Weeping patches or stem bleeds are a general symptom or host response to tissue attack from a range of pests and pathogens. A stem bleed alone does not indicate AOD.

Lesion under bark

Underneath the outer bark at the bleeding point, the inner bark breaks down creating a lesion, which develops into a fluid-filled cavity.

D-shaped holes

In approximately one third of cases 'D-shaped' exit holes of the beetle Agrilus biguttatus are present in bark plates of affected trees. The 'D-shaped' exit holes are approximately 4mm wide and 3mm high.

Tunneling

Bark removed from trees with symptoms of Acute Oak Decline may show signs of tunneling from the larvae of Agrilus biguttatus.

For more details, please visit **www.forestry.gov.uk/acuteoakdecline**