

# Felling of Sycamore trees in relation to *Atypical Myopathy*: A statement for arborists and horse owners

## Introduction

It has been proven that trees provide us with many benefits and have a significant role to play in our own wellbeing, recreation and place making. Trees also provide benefits to horses, including shade, shelter and screening as well as contributing to wider habitats and ecosystems. In some locations, such as impoverished land or sites suffering from exposure, sycamore trees can be of huge significance in establishing and maintaining tree cover. All of these benefits are in addition to trees' unseen contributions such as purifying the air, trapping pollutants and storm water attenuation.

Atypical Myopathy (also known as "*sycamore poisoning*" or *Seasonal Pasture Myopathy*) can be a fatal disease for horses, with mortality rates between 61 and 90 percent, which has been associated with horses eating sycamore seeds, leaves and seedlings. The British Horse Society advise horse owners to minimise the exposure of their horses to sycamore seeds, seedlings and leaves to help prevent Atypical Myopathy.

## The main preventative measures horse owners can take include:

- Where horses have poor grazing, ensure supplementary forage/feed is provided
- Ensure the pasture is not over-stocked
- Maintain good pasture management to prevent weeds taking over grass growth
- If moving horses is not an option, fence off areas around the sycamore trees
- Removal of sycamore seeds, seedlings and dead leaves from the paddock
- Where possible, consider stabling the horses overnight to prevent over-grazing of pasture

In 2017 a testing service, supported by funding from The Horse Trust and Animal Care Trust, was introduced at the Comparative Neuromuscular Diseases Laboratory at the Royal Veterinary College which tests seeds, seedlings and leaves for Hypoglycin-A (HGA), the toxin that can cause Atypical Myopathy.

This test provides the opportunity for horse owners to assess the potential risk the sycamore materials pose to their horse(s) and then allow them to respond appropriately. However, the toxicity is not only related to the toxin concentration in the plant material but the amount of plant material ingested by the animal which is difficult to control/measure. Interpretation of the HGA test results range from a 'below limit of detection' through to a 'high' rating. Where a 'below limit of detection' result is given, there is no evidence of HGA and on this basis there is no suggestion that horses grazing the submitted plant material are at risk. Where a 'high' result is given, we would support the advice provided by the RVC in that horses should be immediately removed from the

field where the submitted plant material was collected until the source of the plant material has been removed.

However, the most effective management system will be to ensure that the pasture conditions are adequate and appropriate for the number of horses, so that they are less likely to consume sycamore seeds, seedlings or leaves.

Horse owners need to be aware that the felling of sycamore trees will not guarantee the full prevention of Atypical Myopathy as cases have occurred where horses have consumed sycamore seeds that have been blown into, or carried downstream into, their paddocks. It is possible for sycamore seeds to disperse 100's of metres. It should also be noted that if you fell a mature sycamore it is highly likely many more seedlings will grow up in that space from previously dispersed seeds.

Tree owners and those working in arboriculture should be aware that felling sycamore trees due to concerns about Atypical Myopathy is not an appropriate first course of action. It is strongly advised that the HGA test should be undertaken first with management decisions based on the results. Therefore, arborists should advise horse owners that the test is available and not facilitate the unnecessary removal of sycamore trees.

If, after sensible consideration, tree owners or arborists are convinced that felling is required, we strongly recommend you consider if the trees are protected by law.

Details of professionals working in arboriculture and answers to other tree related questions can be found at [www.trees.org.uk](http://www.trees.org.uk)

The British Horse Society have issued advice on Atypical Myopathy which can be found on their website: [www.bhs.org.uk](http://www.bhs.org.uk)

Further details and information on the Hypoglycin-A testing service are available from the Royal Veterinary College: [www.rvc.ac.uk/equine-vet/news/equine-atypical-myopathy-toxin-and-biochemical-tests-and-tree-sample-testing-available-at-the-royal-veterinary-college](http://www.rvc.ac.uk/equine-vet/news/equine-atypical-myopathy-toxin-and-biochemical-tests-and-tree-sample-testing-available-at-the-royal-veterinary-college)

If horse owners are concerned about their horse's health they should contact their vet immediately.