



- Find a horse chestnut tree (or more than one - you can submit records for many trees).
- Write down the nearest postcode or the tree's location. You'll need to know this when you submit your records at www.ourweboflife.org.uk.
- Take a careful look at the leaves near the bottom of the tree. Do they have pale, whitish or brownish patches made by leaf-mining moths?
- Look at a leaf which you think is **typical** of the leaves **near the bottom of the tree**. Give it a 'damage score' as follows:



0. The leaf is completely green. No evidence of moth attack



1. Just a couple of whitish/brown patches on the leaf



2. There is more green than white/brown on the leaf



3. You can't decide whether green or white/brown dominates. It's about half green leaf and half whitish/brown patches



4. The whitish/brown patches definitely cover more than half the leaf. They may cover all the leaf



?. The whitish/brown patches are definitely present, but you are unable to give it a damage score



Leaves damaged by the alien leaf-mining moths are distinctive:

- Mines start whitish with a brown spot and then turn brown.
- Mines usually start away from the edge of the leaf and spread between the veins, only rarely crossing the veins.
- Often, a caterpillar or a brownish pupa can be seen in each mine when the leaf is held up to the light.
- From mid July, adult moths emerge. Their mines turn brown but are identifiable by their shape and position. Fresh mines are often present.



What to look for: alien leaf-mining moth damage. Damage score = 2



Leaf blotch caused by fungal infection, **not** the moth (Photo: David Glaves)



It is **not** the alien leaf mining moth if:

- Only the tips or edges of the leaf have shrivelled up and turned brown (this might be damage to vessels carrying sap).
- Patches are brown & edged with yellow (this might be fungal infection).

New for 2011. What is under the tree?

Look at all the ground under the tree's canopy.



Only short grass

Is there just mown grass?
(Nowhere for leaf litter to collect)



Longer grass
(as well as short grass)

Or is there other vegetation?
(Where leaf litter will collect in the autumn)

The alien moths and their natural pest controllers may overwinter in the leaf litter under the tree, but in some places the leaf litter will be cleared away. We do not know how this will affect the number of natural pest controllers.

By the summer there is no sign of leaf litter, so we are asking you to record whether there are places that leaf litter could have collected.

Submit your records at www.ourweboflife.org.uk

Click on '[Mission: alien moth survey](#)'

Remember, you can submit records for more than one tree.
You can also submit records for the same tree (about once per month)
to track the rate of damage through the summer.

About this mission

- Anyone in the UK can complete this mission.
- The alien leaf miner moth has spread in the UK since it was first detected in London in 2002. Each year the moth spreads further. We want to know how far it has got and how much damage it is doing.
- Records of trees with no damage (damage score = 0) are just as important as positive records to help us understand how far the moth has got.
- The alien moth over-winters in leaf litter under the tree and there is evidence that if the leaf litter is removed (e.g. in parks or gardens) then it causes a reduction in the amount of damage to the horse chestnut leaves.
- You don't need to pick leaves for this mission, but if you do decide to, please only pick leaves that you can easily reach from the ground.
- We are collecting data to answer two specific questions:
 - Is the damage greatest where the moth has been longest? (Data collected this year adds to that collected last year.)
 - Is the damage least when there is no leaf litter under the tree in the winter?
- If you find an infected tree, you can also take part in '[Mission: pest controllers](#)' between 3 and 9 July 2011. See www.ourweboflife.org.uk for more details.

Here is some space for you to jot down your records:

Tree location notes	Damage score (0-4)	What is under tree? (Only short grass or something else?)