Pests and diseases – surveying guide

Link to survey: https://arcg.is/W15nS

Use this guide to help you carry out your survey and record your findings. There are certain species of trees we would like you to concentrate your surveying time on and each species has a related threat from a pest or disease. It is likely that many trees will be in good condition and free from pests and diseases, but it is still good to survey healthy trees and report them via this survey so that the Forestry Commission has a good idea of healthy pest free areas. It also means we can identify where certain species of trees are if we need to conduct further surveys at a later date.

The list of pests and diseases we would like you to focus on are:
- Chalara ash dieback (*Hymenoscyphus fraxineus*)
- Sycamore tar spot (*Rhytisma acerinum*)
- Oak powdery mildew (*Erysiphe alphitoides*)
- Horse chestnut leaf minor *(Aesculus hippocastanum)*

These have been chosen as they are common to the UK. If you spot any suspicious symptoms that are not on this list, use the 'other' category to record them.

Surveying tips

If you are using the web survey form on your phone or tablet then you can take them out into the field, although it still might be useful to take a pen and paper to take notes, and a camera to take photos.

If you don't have the survey on a tablet or phone, then make sure you look at the survey before you head out so that you can record with pen and paper all of the details that you will need.

If you have a phone with the right app such as OS locate, or a GPS device you will be able to find out the grid reference of your tree/group of trees when you are out in the field. Otherwise make a note of your location so that you can find it out later.

Once you have chosen tree(s) to survey or spotted some suspicious symptoms:

- First take a wider view of the tree in context. Is it on a street or in a field, park, or forest?

- You may need to make notes about other causes of damage if it has an impact on the health of the tree. Could the tree have been damaged by lightening, a vehicle, or a mammal such as a squirrel that can strip off the bark?
- It's not always possible to see the crown or top of the tree but pay attention to its health if it is visible and then work methodically down the trunk of the tree to the base looking for symptoms.
- Take photos of symptoms as appropriate and a context photo of the tree. These are to be submitted to Tree Alert if a full report is needed.
- Screen glare can be an issue when using screens outdoors, so shade is handy.
- The survey app will record your submitted records and send them later if you don't have internet access out in the field.

Guide to using the survey

Click on this link https://arcg.is/W15nS and open the survey in your browser. You do not need to download or open in the app. You can save the survey as a bookmark in your browser for future use. This will work on mobile phones, tablets, or laptops.

You will then be able to complete the survey by typing in your details and recording your findings. At least one of your groups' entries needs to include an email address so we can send the results back to you. We suggest that this the teachers email address. Then as long as everyone puts the same school name, we will be able to collate your group's data.

The location field is very important as this gives us the polygon on our map to identifying where the tree or trees surveyed are. Use the target icon, colored in yellow to zoom to your location, or do this manually by toping in the postcode or area name. Then click on the polygon icon shown right to draw you're the area around the tree(s) you are reporting. Its not always possible to be 100% accurate with the polygons so just get as close to capturing the tree and area as you can.
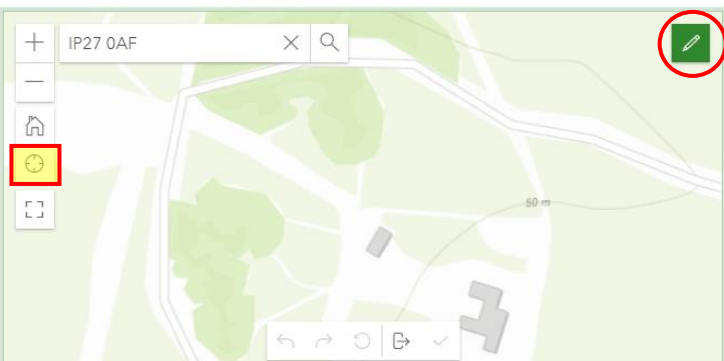
Below shows how a polygon may look. It can reflect an individual tree, or several trees of the same species.
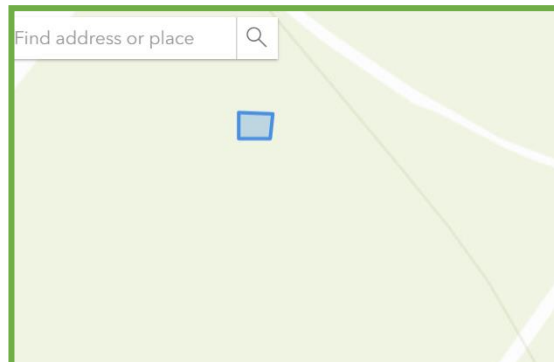
Please complete the national grid reference field. There are a variety of apps you can download that will find your grid reference such as OS locate. You can also use www.gridreference.comto find this.

Then work through the rest of the form, recording the species of tree, how many trees of that species you looked at, what disease you were looking for, and whether or not you saw any symptoms. You will need to submit separate reports for different species or different areas.

If you have identified symptoms, you will be asked to go to Tree Alert to make a full report. https://treealert.forestresearch.gov.uk/ you can then click submit and we will receive your report. This will then be dealt with by our Tree Health Officers.

Each tree you survey will give us a polygon on a map as per this image. We can click on the polygon and see the information recorded for that record.

The survey information is recorded in a table

Name	Survey Date	NGR	Tree species surveyed	Number of trees surveyed	Pest(s) surveyed for	Other - Pest(s) surveyed for	Symptoms observed?	Symptom comments
Robert sketchley	Jun 17, 2021	Su08002876	Larch	1	other	Ramorum	No	
Robert sketchley	Jun 17, 2021	Su07r422902	Beech	1	other	Ramorum	No	
Robert sketchley	Jun 17, 2021	Su07352917	Sweet chestnut	2	Chestnut_gall_wasp,Sweet_chestnut_blight		No	
Robert sketchley	Jun 17, 2021	Su09062907	Ash	2	Chalara_ash_dieback_		Yes	Crown dieback in one tree
Robert sketchley	Jun 17, 2021	Su09062907	Oak	2	Acute_oak_decline,Oak_processionary_moth		No	
Robert sketchley	Jun 17, 2021	Su08972925	Silver birch	1	Bronze_birch_borer		No	
Robert sketchley	Jun 17, 2021	Su089293	Ash	3	Chalara_ash_dieback_		No	
Robert sketchley	Jun 17, 2021	Su089292	Ash	1	Chalara_ash_dieback_		Yes	Crown dieback. Some form of but rot

1 of 14 selected

At the end of the month the Forestry Commission's Biosecurity Officers will collate your data and email it back to you with a map to show all your reports and a spreadsheet with all the collected data for you to analyse. If you require the data sooner than the end of the month, then please email learning.england@forestryengland.uk and we will try to get them to you sooner

To continue this work, you may wish to use the trees reported as sentinel trees. This means you regularly survey them which will act as an early warning system for any outbreaks of pests and diseases.