



Issue 3: April 2014

Phytophthora ramorum

Over the winter the Plant Health Team have been involved in ongoing activity to prepare for the forthcoming survey season; these preparations have revolved around a major GIS data cleansing exercise to validate and improve knowledge of where larch occurs in private woodland and undertaking specialist helicopter training.

The use of GIS is integral to the planning and delivery of both ground and aerial survey and whilst the team currently utilise sub compartment data from the PFE, equivalent data for private woodland is either not available or not consistent. In order to resolve this Plant Health Officers, supported by Forest Research staff from TSU, have been editing, amending and adding to the data set, resulting in more comprehensive data covering the whole of England. This will be used along with local knowledge from Area Teams, to provide the basis for planning aerial surveys over the forthcoming season. It will also be utilised by the modelling teams from Cambridge University to enhance the predictive and disease management advice contained within their models.

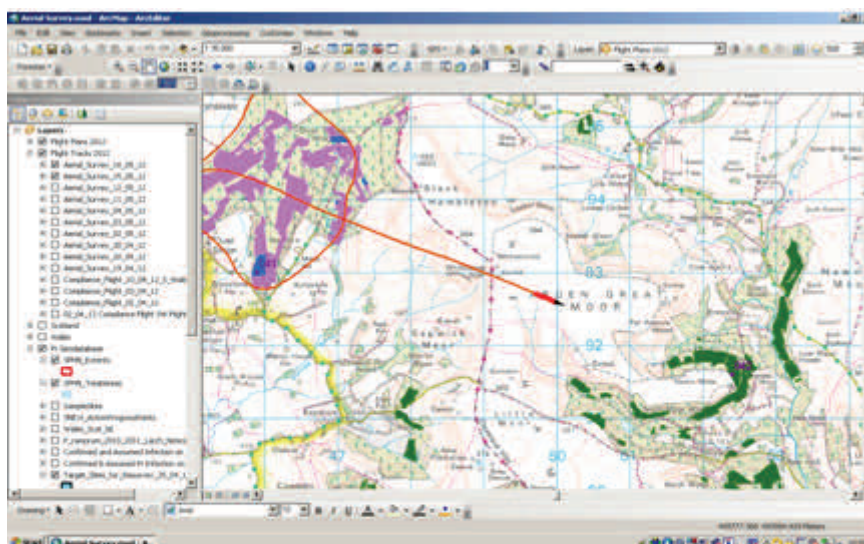


Fig 1: This screenshot shows the data in use during an aerial survey in Cumbria – pink polygons showing larch on the PFE, green polygons showing larch in private woodland and the black arrow with orange trail showing the helicopter and flight track.



Fig 2: Barnaby Wylder, Plant Health Officer taking part in aerial surveillance.

The team have also been involved with personal preparation for the aerial survey season ahead by undertaking a bespoke three day helicopter training course with colleagues from Natural Resource Wales and Department of Agriculture & Rural Development Northern Ireland. The purpose of the course was to refresh and familiarise team members with aerial survey operations, focusing on working with pilots, gaining a better understanding of the operating environment and to practice emergency procedures and protocols.



This included a day learning underwater escape training and basic sea survival, training that none of the teams hope will ever be put into practice but a very worthwhile experience none the less.

Chalara fraxinea

With the new growing season due to start soon the third year of Chalara assessment is in the planning stages. Assessments will take place in a 30km radius from known infection sites across the country to confirm the presence or not of the disease and provide information on future possible management objectives. These surveys will have the same format as previous years in that a rapid assessment by 10km square will form the basis of the survey in conjunction with sample collection for laboratory confirmation Chalara. These surveys will be conducted under the FCE Plant Health Framework Survey Contract.

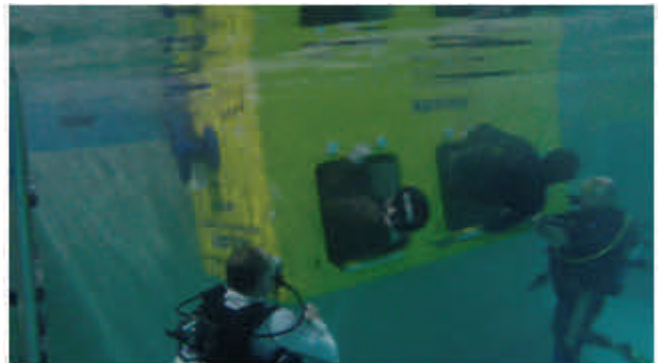


Fig 3: The team undertaking emergency underwater escape training at Andark Diving in Southampton

Tree Alert— a tree pest and disease sighting reporter available on the web at www.forestry.gov.uk/treealert, or as a tree alert app for reporting Chalara.



Oak Processionary Moth (OPM)

Following on from the control programme from 2013, where extra funding was provided by DEFRA, similar practices will be undertaken in the 2014 season. Over 300 Statutory Plant Health Notices will be issued to sites covering the three outbreak areas where OPM is present, namely Croydon/Bromley; West London and Pangbourne (near Reading). Where infested trees have been identified for spraying in 2014, all potential host oak trees within 50m will be sprayed. The majority of these sites will have the control carried out by Forestry Commission appointed contractors using *Bacillus thuringiensis* (Bt) and Dimilin as these chemicals have the least impact on none target species and have a proven record for effective control. The sites chosen are known to have had infestation for the last two years, sites older than this will be monitored but not sprayed. Once the spraying has taken place a survey team will investigate the sites to see if re-infestation has occurred.



Fig 3: Oak Processionary Moth

If this happens the nests will be removed manually to help control the population of OPM. There will also be a wider survey programme of 2km from known infestations to try to gauge the extent of OPM spread, new trees found to be infested last season will need to be sprayed for a minimum of 2 years.

Later in the season (August/September) a pheromone trap network will be set up to 4km from known infestations. This will allow us to have a greater understanding of the spread of OPM.

The management of this process is very much dependant on a collaborative approach with stakeholders across London such as Transport for London, NHS, The Royal Park and Local Authorities. Internally we have new contracts supporting data management and administration of the processes, survey contractors and three arboriculture suppliers supporting the control programme of spraying and manual nest removal.

Asian Longhorn Beetle (ALB)/Citrus Longhorn Beetle (CLB)

Works undertaken as part of the winter survey works (completed February 2014) included:

- Winter survey inspecting all trees from 100m to 800m from known sites of infestation, this covers an area of 249.3 ha, an increase in area from last year of 144.4 ha
- Setting up a tree climbing contract to provide six tree climbers per day for a period of eight weeks, to inspect trees for suspicious symptoms. Contract due for completion w/c 14 April 2014.

Fera and the Plant Health and Seed Inspectorate (PHSI) have been carrying out a survey at Paddock Wood in Kent to try and detect any remaining infection after the outbreak in 2012, and two suspect pupae and one larva were discovered by at the beginning of April this year. The finding was on Acer/Alder trees on the boundary of the 100m infestation zone. However the size of the exit holes and the specimens were not typical of ALB. Subsequent laboratory analysis has confirmed that they are indeed examples of a native longhorn species and not ALB.

Dothistroma needle blight (DNB)

The intensive surveys to assess mortality and needle retention of Scots Pine infected with DNB have now been completed. This data will be passed onto Forest Research to enable impact assessment to be made for future DNB management strategies. Further surveys will be conducted over a larger age range of Scots Pine in the coming season to assess for the presence and impact of the disease. These surveys will be conducted using the FCE Plant Health Framework Survey Contract.



Acute Oak Decline (AOD) - Research in England and Wales

Work to date has included:

- Studies to elucidate the role of *Agrilus biguttatus* in AOD and investigate links between the buprestid beetle, and its larvae and bacteria are in progress.
- Rapid diagnostic tools to detect the bacterial species concerned are being developed.
- Many of the bacteria isolated from symptomatic oak were previously not named and some were even unknown to science. The identity of these bacteria [is being formalised](#) and the role that bacteria play in causing tissue death in oaks affected with AOD is being investigated.
- Mapping of selected AOD sites has recorded the position of symptomatic as well as unaffected trees. Intensive monitoring of symptom development in individual trees on the mapped sites is underway. Data obtained from the monitoring and mapping exercise will be analysed spatially. Results will give insights into the expanding distribution of this condition, levels of tree mortality and/or recovery, as well as changes in the severity of the condition within sites.



Fig 4: Stem bleeding due to Acute Oak Decline

Other....

Plant Health England Framework Contract

A new Plant Health Pest and Diseases Survey contract with a value of £2m over three years has been put out to tender. This framework contract will cover all of England in 14 lots with five ranked suppliers for each lot. This framework contract will enable PH England to continue with ongoing pest and disease surveys and provide a resource for rapid response to future outbreaks should they occur. This new framework contract will include survey work for the OPM hotspots around London and Pangbourne and will take over from the existing OPM contract when that ends in May 2015. The tender is being evaluated at present and is due to start in May of this year.

Tree Health Management Plan

A [Tree Health Management Plan](#) has been published by Defra. As a development of the Chalara Management Plan this covers *Phytophthora ramorum* and OPM in some detail as well as referring to a number of other pest and disease threats. To support the Tree Health Management Plan Defra have made over £3m of additional funding available to the FC.



The majority of this will enable continuation of the OPM pilot control programme in London, also the rolling forward for a further year of key elements of the five year Phytophthora programme, but Ministers have committed to further review of the approach being taken on Phytophthora. In addition to this outbreak management work, a programme of enhanced surveillance and inspection will be undertaken, and a number of additional posts created providing GB and FR science support. The enhanced inspections have already identified a significant quantity of non compliant wooden packaging associated with steel imports from Turkey.

In England a number of new posts will be created. These will focus on communications, GI evidence and analysis, IT development, contract management and biosecurity advice. One of the biosecurity officers will focus on interfacing with the arboricultural sector as this is a high risk pathway and relatively unknown to us, the post will also provide the necessary expertise to enable us to supervise arboricultural control activities when they are required. The second biosecurity post will focus on the traditional woodland sector. Both posts will be supported by a biosecurity e-learning package currently under development.

Staff— Meet the new team members

Katie Barritt



Despite working a variety of jobs all over the world, I've always been deeply rooted in arboriculture (don't excuse the pun, its terrible). After graduating I put my practical skills to good use as a tree surgeon and assisted in various ecological projects before going out on a limb and getting a job in the Civil Service working my way towards the Forestry Commission.

I joined Plant Health as a support officer in January 2014 and have been learning about the wealth of work that is performed by this dedicated team since. The most involved part of my work has been for the Dothistroma Needle Blight (intensive) survey where I have acted as a point of call for our contractors and been able to gain some GIS knowledge in the process. I am looking forward to getting to see more of the survey work in action and will be acting as secretary for the Oak Processionary Moth project board meetings.



Rob Sketchley

I joined the Forestry Commission in February of 2013 as temporary admin staff. My initial duties included filing, processing plant health notices and identifying larch from aerial photographs! I soon developed a fascination for the work the Plant Health Team performs across the Country and within 10 months I had completed field training in testing Larch for *Phytophthora ramorum* and Pine for *Dothistroma Needle Blight*. I am now lucky enough to work as a permanent member of the Plant Health Team in an administration support capacity. My main areas of work are now dealing with public enquiries for suspected pest and disease outbreaks and processing statutory plant health notices for land infected with *Phytophthora ramorum*.



Next I'm hoping to join my managers in their aerial surveillance tasks, though I may need to drop a few more hints and pester them some more to be allowed to join the helicopter crew!.

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