

BIOSECURITY PROGRAMME BOARD: 30th April 2013

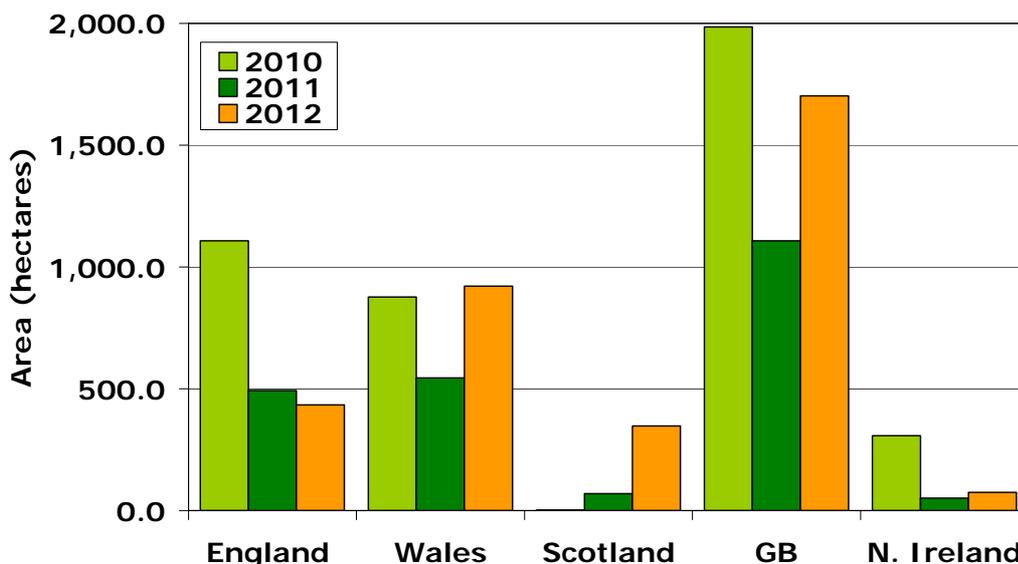
Tree Health and Plant Biosecurity Action Plan

As a result of the rising threat to our trees and woodlands, the Government has made preparing for and managing risk from plant disease a top priority. Together with the Department for Environment, Food and Rural Affairs (Defra), we have made good progress against the Tree Health and Plant Biosecurity Action Plan during this year. We have been closely involved with the setting up of the Defra Tree Health and Plant Biosecurity Expert Taskforce. The Taskforce is an independent group, drawn from key members of the academic community, to bring a multi-disciplinary approach to ensure Defra has access to the most up-to-date and robust evidence to inform decisions on dealing with tree and plant disease. FC has provided expert input to the Taskforce as members of a Practitioners' Advisory Group. The Taskforce produced an interim report to the Government in December 2012, which can be seen at <http://www.defra.gov.uk/food-farm/crops/plant-health/tree-taskforce/>.

Phytophthora ramorum

The area of new outbreaks due to be felled in 2012 has increased beyond the total amount felled in 2011, largely as a consequence of new cases in Wales and Scotland (Fig.1). The reason for the increase in new cases is thought to be due mainly to better diagnosis of the disease and rapid expression of disease symptoms early in the year. The disease was confirmed for the first time in two woods in South East England, which had been kept under surveillance due to their proximity to known areas of infected rhododendron. Both woodlands are close to areas where rhododendron was known to have been infected with *P. ramorum* and were included in helicopter surveillance accordingly.

Figure 1: Areas of infected larch felled or due to be felled



The most significant new findings have been those associated with existing outbreaks, most notably in south Wales and south west Scotland. By contrast, the flights have identified slightly fewer new suspect sites in England than was the case last year. Observers have noted a rapid progression of crown symptoms in May and June 2012 and comparing weather data with the 30 year trends revealed that April rainfall was approximately double the average. Rainfall in was also

wetter than average in June and July and overall the year's weather patterns are expected to have been more favourable for the disease than the last 2 years throughout the UK.

Phytophthora lateralis

In 2012/13 FC and Fera dealt with a small number of new outbreaks of *P. lateralis* on Lawson's cypress. In the west of Scotland there were a further 6 new outbreaks. Fera dealt with 2 new cases, 1 in a cemetery in Wales and 1 in a private garden in East Sussex.

Cases of *P. lateralis* reported in Great Britain 2010 to 2013

Year	SPHN	Sites	Woodland	Shelter belt	Municipal Park or Cemetery	Private Garden	Policy wood or parkland
2010	1	1			1		
2011	10	8		1	3	3	1
2012	9	6	1	2	2		1
2013	2	2				1	1
Total	22	17	These columns represent a breakdown of site types				

Aerial surveillance during 2012 had picked up eight potential new sites. Further investigation revealed that the damage observed from the air was in fact fire damage from vandalism. The trees on one of the sites had been felled by the time the ground visit was made and it was not possible to verify the cause for the tree death.

There are many more suspect sites in Northern Ireland (73).

The current disease response strategy is containment on a site basis. This policy remains under ongoing review and FR has agreed to update a 2006 pest risk assessment to take into account the recent UK findings and the discovery of a new lineage of the pathogen.

The OMT met in April and has recommended the formation of a formal UK OMT to the Biosecurity Programme Board.

Phytophthora austrocedrae

P. austrocedrae was first confirmed as the organism responsible for the death of juniper bushes on a nature reserve in the north of England in November 2011. Further investigation into the die-back and death of juniper bushes has been carried out in England and Scotland during 2012. A consultation exercise has been carried out on a rapid pest risk assessment produced by Forest Research it is understood that the overwhelming response was to pursue statutory action through containment, pending further information about the distribution of the organism. This action would focus on eradication of findings affecting nursery plants, which could act as a pathway for the pathogen, eradication of outbreaks of a limited nature and containment of outbreaks affecting highly sensitive or environmentally valuable sites.

In England an Outbreak Management Team is chaired by Natural England with Fera as the lead plant health authority. In Scotland Forestry Commission (Scotland) chair the Scottish OMT and lead on outbreaks in the wider environment with Scottish Government taking the statutory lead in relation to nurseries and gardens.

England outbreak sites: 1 in a private garden in Devon
 3 in a nurseries in Devon, Cumbria and County Durham

6 in the natural environment in County Durham and Cumbria

Scotland outbreak sites: 1 in a Glasgow private garden
1 at a bowling club a short distance from the garden infection
4 natural environment in Perthshire and north east Scotland

Containment notices have been issued or are about to be issued on the wider environment sites and destruction notices have been issued for the two garden sites.

Helicopter surveillance has been used to map down to the level of individual bushes with disease symptoms. This information has been passed to Natural England and Fera to assist with ground-truthing.

Both OMTs have recommended the formation of a formal UK OMT to the Biosecurity Programme Board.

Sweet chestnut blight

There have been 9 records of *Cryphonectria parasitica*, sweet chestnut blight on trees planted since 2007. As previously reported, the plants were imported from the same source in France and planted for nut production. Subsequent follow-up of plants imported from the same supplier has found a low level of infection all deliveries up to the most recent consignment delivered in 2011. All trees at the infected sites were destroyed and surveys were undertaken in adjacent woodland to determine whether this disease had spread. No further findings have been made and plants supplied in 2011 were released for planting.

A rapid pest risk assessment has been prepared by Aberdeen University and this is with the Pest Risk Analysis team in Fera with a view to adopting as a rapid PRA for the UK. An amendment to the Plant health (England) Order has been prepared which makes a requirement to notify Fera about the intention to land plants of *Castanea* (as well as *Fraxinus*, *Platanus* and *Quercus*). The information supplied by pre-notifications will be used to improve our understanding of the volume of the trade in *Castanea* and will also allow for inspection once material is landed.

Asian Longhorn Beetle

Action to eradicate the outbreak of Asian longhorn beetle in Kent was completed before the main period of adult emergence in July 2012. A total of 2166 trees were felled and destroyed within the outbreak zone at Paddock Wood during the eradication programme.

The final number of infested trees, confirmed by laboratory analysis, was 66. Forty-one of these (62%) were sycamore trees (*Acer pseudoplatanus*) and 11 (17%) were field maples (*Acer campestre*). The other tree species attacked were willow, birch, poplar and horse-chestnut (Table 2).

Twenty-four of the 66 infested trees (36%) were identified as infested from the ground during the initial survey work, whereas 42 (64%) were only identified as infested once they were felled and the branches and stems were searched in detail. The latter often had only 1-2 larval galleries on small branches high in the canopy, but these galleries more often than not contained a live larva.

The samples returned to Alice Holt were processed by 20th September and they revealed a total of 556 exit holes of ALB, formed either in 2011 or in previous years. The oldest exit hole identified to date is from 2008. With the average life-cycle taking two years (which seems to be the case at Paddock Wood), this exit hole points to an initial infestation at least as far back as 2006.

In total 354 live larvae, 34 live pupae and 2 recently enclosed adults of ALB were recovered from the infested trees. The 2 adults emerged in the cool (15°C) storage conditions of the quarantine facilities at Alice Holt during September. There was no evidence that any adults of ALB had emerged before the samples were brought to Alice Holt or had emerged in the field before the last tree had been felled in the outbreak zone. We can be reasonably confident therefore, that all of the operational work carried out in 2012 was completed before adult emergence.

The larvae and other life stages of ALB recovered from Paddock Wood have been preserved in IMS and these, along with wood samples containing the exit holes, will be analysed further to verify the length of the life-cycle and to chart the development of the outbreak over time.

The data collected will provide a basis for calculating the potential rate of increase of the ALB population and the capacity of the beetle to spread.

Oak processionary moth

The 2012 survey programme identified that the moth had expanded its range within the core infested area to include the London Borough of Elmbridge. The area infested in 2012 and the boundary for a new 10 km buffer zone have been re-mapped to take account of the 2012 survey findings (Figure 2). Where part of a local authority falls within the buffer zone the whole administrative area for that local authority has been excluded from the protected zone. A revised protected zone proposal has been submitted to the European Commission to take account of the new infestations in London (although not the most recent findings of old nests in the Borough of Westminster).

Despite media speculation, OPM did not represent any threat to the London Olympics. Findings of OPM on Wimbledon Common and in the vicinity of the Tennis Centre were made just before the Tennis Championships were due to get under way. Landowners cooperated fully with instructions to remove larvae and nests before the event opened and will be alert to the risk from OPM in future years.

A separate, new outbreak has been identified on the border between the London Boroughs of Croydon and Bromley. This outbreak is reasonably well contained within the grounds of a hospital and is under eradication as it is not thought to be linked to the west London outbreak area.

A control plan for OPM in London has been prepared by Forestry Commission England and tabled a recent meeting of the OPM advisory group. The plan was welcomed and has the support of the key stakeholders on the Advisory Group.

A framework contract for control services is being tendered and contracts for prophylactic spraying and nest removal on infected sites will be issued shortly. It is recognised that close working relations will be needed between contractors, landowners and the FC to ensure effective day to day management of sites.

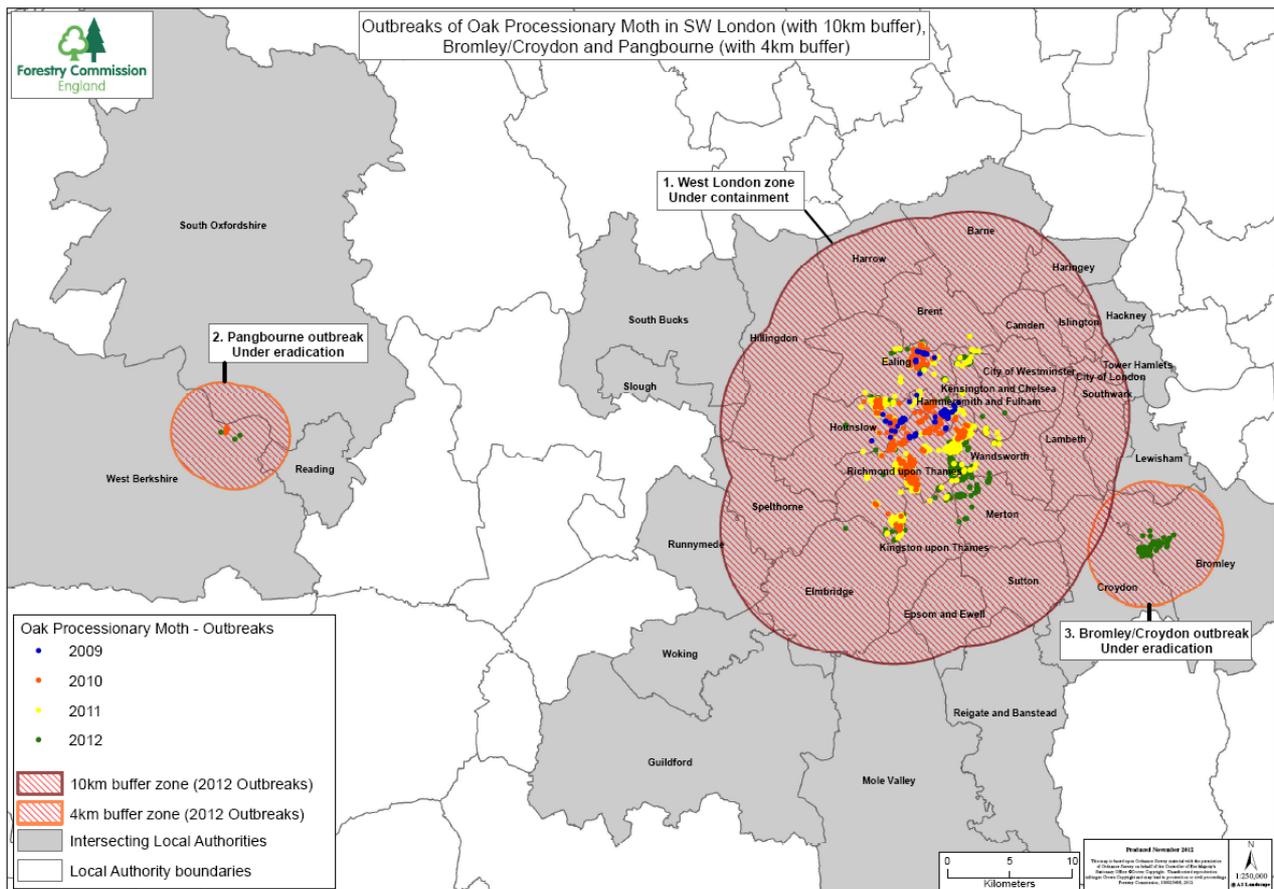
New funding from Defra for control of OPM is being made available to landowners as a pilot grant. The grant structure and guidance is being finalised. To be eligible for grant, landowners should be in receipt of a plant health notice, have signed a grant agreement including acceptance of liabilities, agreed a site assessment for spraying and have authorised both entry of contractors onto site and their satisfactory completion of work.

There have been no further findings in Sheffield and the Leeds outbreak is considered to be eradicated. Efforts are continuing to eradicate an outbreak in Pangbourne, West Berkshire. Further input to surveillance and control measures appear to be working as the number of infested trees

continues to fall There were 3 infested trees found (30 in 2011), 3 nests (61 in 2011) and 3 adults (18 in 2011). There has been one finding of a nest on the edge of a small area of woodland to the south east of Pangbourne and we are seeking support from the landowner involved to improve access to the woodland for future monitoring and control.

FC has applied for the extension of use of Dipel (Bt) to woodland situations and this has recently been granted by CRD. Plans are in place to carry out a pilot of helicopter spraying of woodland where OPM has been found close to woodland. The work will be funded by FC and the spraying operation will be closely monitored by scientists from Forest Research.

Figure 2: OPM outbreaks and new buffer zones at Pangbourne and in London 2009 to 2012



Ash dieback

During the year, we faced a new introduction of a serious disease of ash trees caused by the *Chalara fraxinea* fungus. The disease has already affected a high proportion of ash trees in Northern Europe and was discovered for the first time in Great Britain in a nursery in Buckinghamshire in February 2012. A first outbreak was confirmed on recently planted trees in July and in October this year, it was also found in the wider environment in woodland in Norfolk. Following a consultation exercise FC drafted an emergency regulation to ban the importation and movement of ash trees, which was introduced at the end of October. A unique national survey to ascertain the presence of Chalara in the wider environment was undertaken in five days, visiting over 10,000 sites. This required co-ordination between Defra, the Food and Environment Research Agency (Fera), Natural England and the devolved forestry administrations. Over 500 Forestry Commission staff worked in partnership with these other organisations and the Country Landowners Association, the Woodland Trust and the National Trust. To date over 460 UK sites

have been confirmed with infected material comprising 19 nurseries, 266 recently planted sites and 177 in the wider environment. We worked closely with other departments, agencies, and stakeholders to finalise the management plan for Chalara, which is now being implemented.

Pine-tree Lappet Moth (*Dendrolimus pini*)

The pine tree lappet moth population involved in the Scottish outbreak is continuing not to increase in size or distribution and we take from this that the strategy to contain this pest has been successful. The period during which movement of timber is permitted was been extended on the advice from Forest Research and the Outbreak Management Team has been disbanded although scientists from Forest Research will continue to monitor population levels by glue-banding and pheromone trapping inside and outside the outbreak area.

Dothistroma Needle Blight (*Dothistroma septosporum*)

The health of pine continues to suffer as a result of Dothistroma needle blight. We published a GB strategy for managing the disease in April 2012 with the aims of retaining pine as a silvicultural option, conserving Caledonian pinewoods and reducing the risk of damage from other pests and diseases. Forest Research provided specialist training to plant health officers involved with nursery inspections again in 2012. Although the disease was detected in 1 nursery in England and 3 nurseries in Scotland, these are fewer findings than those made in previous years and the DNB Programme Board agreed to scale down the current level support provided by scientists from Forest Research..

Wood packing from China

Recent compliance with wood packaging standards by China has been unacceptable and the concerns about interceptions with live pests have been raised at the Agriculture Council. The Commission met the Chinese authorities in the week of 29th October and China's response to the concerns raised by the EU has been to issue a list of over 1000 interceptions of wood packing from EU member states. These are mostly because of missing marks (which indicate that the packing meets the international standard), but include some in which pests have been found. The Chinese Authorities reported finds of False Blister beetles (*Oedemeridae* spp), *Coptotermes Formosan* (Formosan subterranean termites), Weevils and bark beetles (*Curculionidae*) in wood packaging associated with goods of all kinds from the UK. As some of these species of pests are not known to occur in the UK they may have been picked up en-route to China.

The Commission has authorised a higher level of compliance inspections on wood packaging material via European Commission Implementing Decision 2013/92/EU. This relates to 5 specific commodities: CN codes 2514 (Slate), 2515 (Marble), 2516 (Granite), 6801 (Flagstone) and 6802 (Building stone). The trade in this material from China represents approximately 29 thousand containers each year. Targeted inspections of these stone products will commenced at UK container ports of entry and places of final destination on 1st April 2013. Additional measures such as inspection of all stone imports would have major resource implications, but should reduce the risk of new outbreaks.

Connected with this, two consignments of stone from China had been intercepted prior by Forestry Commission inspectors at Southampton with live insect larvae (comprising a total of 11 containers). The presence of larvae indicated that any wood treatment had been ineffective. Statutory plant health notices were issued requiring the dunnage to be destroyed by burning. The following images are from the consignment.



Frass from larval bore hole



Cerambycid larva



marking heat treatment

Proposed ISPM15 requirements for Wood Packaging Material moving within and between EU Member States

The Forestry Commission is currently liaising with the wood packaging material sector on current EU proposals, following the publication of a consultant's report on the economic, environmental and social impacts, to introduce ISPM15 requirements for WPM moving within and between EU member states. The proposals are viewed as necessary to prevent the spread of pests such as pine wood nematode, however, they would have significant impacts on the trades involved in utilising one way use WPM including construction industry products transported solely within GB or exported to Northern Ireland (UK) and Ireland. These proposals will be discussed at a Chief Plant Health Officer's meeting in early May.

Other port investigations

2 shipments of steel from India were held at the Port of Liverpool due to the use of dunnage which was not compliant with ISPM 15. In both cases the off-loading was suspended until arrangements were made to incinerate the material. FC has written to the importer and to the Indian authorities and has explained that it will not permit landing of non-compliant material in the future.

A separate investigation of suspected fraudulent use of forged FC customs release documents has concluded. The case had come to the attention of an inspector who had placed a hold on a shipment of timber only to be informed that customs had already been provided with release documentation. The importing agent concerned was interviewed by the police and has admitted to the offence. We understand that the agent will receive a police caution.

Forestry Commission
Edinburgh
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www.forestry.gov.uk/planthealth