

29 JUNE 2017

THREATS TO TREES FROM PESTS AND DISEASES

1. Purpose

1.1. To provide an update for Commissioners on the current status of threats to forests woodlands and trees in GB.

2. Background

2.1. Memo 11/16 presented to Commissioners at their June 2016 meeting outlined the threat status to GB's forests and woodlands. It also set out the current management structures around plant health across GB, and some of the implications of the EU plant health regime.

2.2. This paper provides an update on the current status of plant health, provides more detail on the EU plant health regime implementation process, and a summary of the current work on plant health preparations for the UK leaving the EU.

3. Current status of plant health

3.1. **Chalara.** As at 3rd April 2017 the disease had been confirmed at 41.8% of all 10 km grid squares at locations in the GB wider environment. Survey work has continued to establish a baseline for the known areas of infection. A total of 1,185 grid squares now have infection in the wider environment, an increase of 113 squares since November 2016. See Annex 1 - Chalara confirmed infection sites as of 3rd April 2017

3.2. **Ramorum disease on larch.** Early season monitoring flights have been undertaken. See Annex 2: Summary map of *P. ramorum* on larch in October 2016

3.3. In Scotland, with the exception of some disease expansion in and around the Management Zone, little potential *Ramorum* infection has been observed. Most of the suspect sites found are likely to be the result of management (ringbarking or chemical killing), squirrels, drainage or fire and the vast majority of the larch observed appears to be in good health, including in areas where *P. ramorum* infection has been confirmed in previous years. Ground surveys are underway for all of the suspect sites found.

3.4. In England, no significant spread of symptoms or occurrence in new areas was observed. Observations were restricted to localised symptoms in small groups of trees, individual trees and branches in areas that have previously been associated with infection. Flights were undertaken predominantly around Devon on 6th June targeting sweet chestnut (SWC) associated with *P. ramorum* (Pr) and *C. parasitica* (Cp). Areas of dieback in SWC were observed throughout the flight with the majority of sites

having previously been confirmed or suspected to be infected with *P. ramorum*. These sites will be followed up with ground survey to try and determine the causal agent(s).

3.5. In Wales, NRW have carried out the first tree health aerial surveys of 2017, primarily focused on *Phytophthora ramorum*. Initial findings show a significant increase of infection in the western part of Mid Wales. The flights have identified 130 new suspected sites across Wales; 95 sites are in the Disease Limitation Zone and only 35 in the Core Disease Zone. 100 of the sites are located in the West-Mid Wales area. The level of infection within these new sites was also higher than on new sites in the previous two years, with 25 to 50% of trees in some blocks showing symptoms of infection. In other areas of Wales, new suspect sites were limited, with only minor symptoms being displayed and spread appeared low, even in areas of previously large scale infection (CDZ), and fairly consistent with the last few years' findings.

3.6. **Sweet chestnut blight.** Following an outbreak of sweet chestnut blight in Devon a prohibition has been introduced on the movement of sweet chestnut material including plants, logs, branches, foliage and firewood out of, or within, six zones. Five of these zones are in Devon and one is in Dorset. The prohibition on movement is implemented by The Plant Health (Sweet Chestnut Blight) (England) Order 178/2017. Evidence which has emerged about the pathogenicity of the disease had allowed the extent of the original prohibition zones to be scaled back in May. These will remain in place until further notice but will be subject to review following future monitoring in the zones. The Forestry Commission and the APHA are continuing their investigation into the extent of the outbreak, which was discovered in December 2016, and this work may result in more zones being established.

3.7. **Plant health risk register.** Of the highest priority 21 unmitigated threats¹ identified on the UK Plant Health Risk Register, 11 are pests or diseases of trees. With mitigation, 6 tree health threats remain in the top 10. Annex 3 shows the most important pest threats pre and post mitigation measures.

4. FC Plant Health Service delivery in 2016/17

4.1. **Statutory Notification Scheme.** From 1 January 2017, a statutory notification scheme, applying to imports into England and Scotland only, requires that all imports of non-regulated solid fuel wood (in the form of logs, kindling, twigs, billets or faggots) from the EU and third countries, plus all regulated solid fuel wood material from the EU, be notified to the Forestry Commission prior to landing. Associated guidance has been published to help importers to familiarise themselves with the differences between regulated and non-regulated material.

4.2. All relevant consignments, irrespective of size/weight, must be notified. Notification provides data to monitor the extent of the solid fuel wood import market where data is not already captured and allows the opportunity to carry out risk based and random inspections of consignments to ensure that they meet the GB landing requirements.

¹ Organisms with an unmitigated UK relative risk rating of 100 or above.

4.3. Since the introduction of the scheme the plant health service is getting a feel for the nature of this trade:

- The projected volume for imports is higher than was originally anticipated.
- The main players have good systems in place for monitoring, quality compliance and traceability.
- There are some issues with conifer bark on kindling and crates (WPM).
- Kiln drying is normally specified for log material.
- Ash from Latvia is the most common type firewood reported.

4.4. **Interceptions.** Monthly monitoring of high profile risks is reported to Defra's Plant Health Risk Group and intelligence is used by Regional Managers to target the activities of inspectors. The interceptions of non-compliant material are normally low risk documentary or marking infringements. An infographic summarising the interceptions from April to March 2017 can be found at Annex 4.

4.5. A recent interception was made at the Liverpool port where live larvae were detected in wood packaging material thought to be associated with imports of steel coils from China. The larvae were confirmed by FR's diagnostic service as being *Anoplophora glabripennis*. The material has been destroyed by incineration under order. The port operators Peel Ports have been put under notice to notify the Forestry Commission of the arrival of future consignments of steel material from China.

4.6. **Contingency planning.** Pest specific plans for Budworms (x4 species) and Oak were published in January 2017. The contingency plan for OPM was first published in April 2015 and is currently being reviewed and updated to ensure that it reflects the updated approach to surveillance and eradication procedures. The *Dothistroma pini* plan is still under discussion with country tree health teams and the Defra PHRG. A contingency plan for Pine tree lappet moth will be developed once the Pest Risk Assessment has been finalised and the PHRG's recommendations on actions issued.

4.7. **Legislation.** The Plant Health (Forestry) (Amendment) (England and Scotland) Order 2016 came into force on 1st January 2017 to include the following:

- Introduction of a Statutory Notification Scheme for firewood imports into England and Scotland.
- Revocation of the GB P. ramorum (Forestry) Order which was consolidated into the Plant Health Order (Forestry) (England and Scotland) Order 2005.
- The Commission Implementing Decision (EU) 2015/789 (in regard to measures to prevent introduction and spread within the Union of *Xylella fastidiosa*).
- The Commission Implementing Decision 2014/690/EU repealing Commission Decision 2006/464/EC on provisional measures to prevent the introduction into and the spread within the Community of *Dryocosmus kuriphilus*.
- The Commission Implementing Decision (EU) 2015/893 as regards measures to prevent the introduction into and the spread within the Union of *Anoplophora glabripennis*.
- The Commission Implementing Decision (EU) 2015/2416 recognising certain areas of the United States of America as being free from *Agrilus planipennis*.

4.8. Further legislative changes are anticipated for 2017/18 and these include:

- Amending the Plant Health Order (Forestry) (England and Scotland) 2005 to include an amendment to the UK Protected Zone for OPM.
- New UK Protected Zone status has been agreed by the EU for *Thaumetopoea pityocampa* – pine processionary moth and for Elm yellows phytoplasma (*Candidatus Phytoplasma ulmi*) and will need to be included in domestic legislation.
- A legal gateway with HMRC to allow the sharing of data relating to importing businesses. This requires an amendment to the Plant (Forestry) Health (England and Scotland) Order 2005. Ministry of Justice approval is required as HMRC require the Order to include a criminal offence if FC staff share the data with third parties.

5. Animal and Plant Health UK

5.1. The Forestry Commission has now joined the UK Science Partnership for Animal and Plant Health. The role of the partnership is to ensure the effective delivery of the Vision and high-level Strategy for UK Animal and Plant Health Research To 2020 and Beyond². The strategy responds to the compelling economic, social and environmental drivers for a more robust and concerted UK response to animal and plant health challenges of critical importance to protecting and enhancing the nation's prosperity and wellbeing. Its aim is to address the UK needs to develop a more integrated, whole-system approach to animal and plant health science to underpin this response. The partnership has now met four times, and is starting to develop a plan of work to deliver the strategy, and to develop relationships which will enable more rapid response to animal and plant health challenges through the pooling of capability and resources. CFS is currently attending on behalf of FC England and FC Scotland

6. EU PH regime implementation

6.1. Preparations for implementing the new EU Plant Health Regime are underway with colleagues in Defra and the devolved administrations (DA's). The new regulation comes into force on 16th December 2019.

6.2. The new regime is more prescriptive requiring surveillance, notifications, plant health measures, and new inspection and sampling procedures. There will be mandatory registration, and new traceability requirements for all operators.

6.3. Tighter controls on imports will be introduced requiring phytosanitary certificates for all imports, unless exemptions apply. This will place greater obligations on importers and point of entry operators.

6.4. There will be a significantly enhanced plant passporting regime, which will be broadened to include all plants for planting. There will be enhanced requirements for operator competence and obligations on authorised operators to demonstrate procedures and monitoring of plant passported material throughout the whole

² <http://www.bbsrc.ac.uk/documents/1601-animal-and-plant-health-report-3/>

production process. There are to be no local exemptions or exemption for internet / distance sales, and plant passporting will be applicable to the smallest trade unit. This should provide a significant and welcome strengthening of the controls to prevent unwanted pests and diseases arriving in the UK.

6.5. The major issue for forestry is that there will be a change to the way that the current exemptions from passporting apply to certain round wood and bark. Under the current regime we have made use of an exemption which has allowed the local movement of round wood and bark within GB without passporting controls. Under the new Regulation a plant passport will be required for plants, plant products and other objects for introduction and movement within GB but without a local movement exemption. There will be alternative exemptions for direct supply to final users and an exception for movement within and between the premises of a registered operator which are in close proximity. (These exemptions are intended to implement the spirit of the local movement exemption of the Directive.) Stakeholder groups in Scotland and Wales have already been informed about this, and arrangements have been made to set up two technical working groups.

- Importers and points of entry on a UK wide basis with APHA leading
- Plant passporting on a UK wide basis with APHA leading but to include a sub-group on timber plant passporting issues with FC leading.

6.6. It was noted that forestry issues in Northern Ireland will be different to those in GB. The Board agreed to keep these TWGs UK wide but allow DAs to run their own as needed. To try and keep the burden on stakeholders to a minimum, Technical Working Group meetings will run concurrently with other Government-led meetings, if possible.

6.7. The UK will continue to negotiate for a regulatory framework that is proportionate and risk-based but the new requirements might mean we have to do more to protect our timber industry and forests than we currently do, such as issuing a 'plant passport' for most timber moved within GB. Forestry workshops are planned to fully thrash out the issues and a cost-benefit analysis for timber passporting will be commissioned.

7. EU Exit and Plant Health

7.1. The FC Plant Health team is working closely with Defra colleagues to provide legislative guidance for the Great Repeal Bill. There are 17 items of legislation classified as requiring modification. Those areas which are under the competence of the Commissioners are plant health, forest reproductive materials, and fees legislation.

7.2. This work has absorbed a lot of time for the current plant health team, and additional capacity is being recruited to support this work and to engage with stakeholders and DA's as it proceeds at pace.

7.3. While the UK will leave the EU, continued trade will be essential, and many of the changes in the new EU Plant Health regime were pushed for by the UK. Thus the work on implementing the new regime is proceeding in parallel with that of exiting the EU, so that the UK continues to have effective biosecurity through the transition period and beyond.

8. Conclusions

8.1. Plant health remains a challenging area. However the relationships between the different arms of Government, which support it, remain positive and effective. Through the Plant Health Risk Group, the Chief Plant Health Officers' group and a number of others, there is good sharing of information and a willingness to collaborate on actions. The GB&NI tree Health Advisory Group continues to meet, and is well attended by industry stakeholders.

8.2. With the UK Plant health strategy in place, FC work has concentrated on ensuring that contingency plans, for pests already present and those outside our borders, are in place. The usefulness of these was demonstrated with the early finding of sweet chestnut blight in Devon, when joint legislation was made allowing a well-coordinated approach to be swiftly deployed.

8.3. Significant levels of funding have gone into research into *Phytophthora ramorum*, Chalara, Acute Oak Decline, and numerous other pests and diseases. The Tree Health and Plant Biosecurity Initiative is coming to an end, and has delivered some valuable new evidence to support work in the field. It is to be hoped that the APHUK partnership can continue to focus on the need for research at this scale in the future. Although *P. ramorum*, Chalara, and Sweet Chestnut Blight remain a concern, we are now starting to learn to live with them, and must continue to produce the evidence to inform landowners and managers how best to mitigate the impacts.

9. Resource Implications

9.1. The only significant resource implication will be if a major effort is required to combat another serious pest or disease threat. This may be a good test of the APHUK partnership to demonstrate how different organisations can work together for common aims.

10. Risk Assessment

10.1. The significant risks we are aware of are listed on the Plant Health Risk Register, and mitigation measures are being put in place to address these.

11. Communications Issues

11.1. Plant health communications are handled by the Defra Comms team. We are developing good relationships with the team, and this should ensure that the right messages get to the right people at the right time. The Plant Health team has appointed a part time communications officer to update the FC website to reflect the evolving state of play for the pests of greatest concern.

12. Implementation and Evaluation Proposals

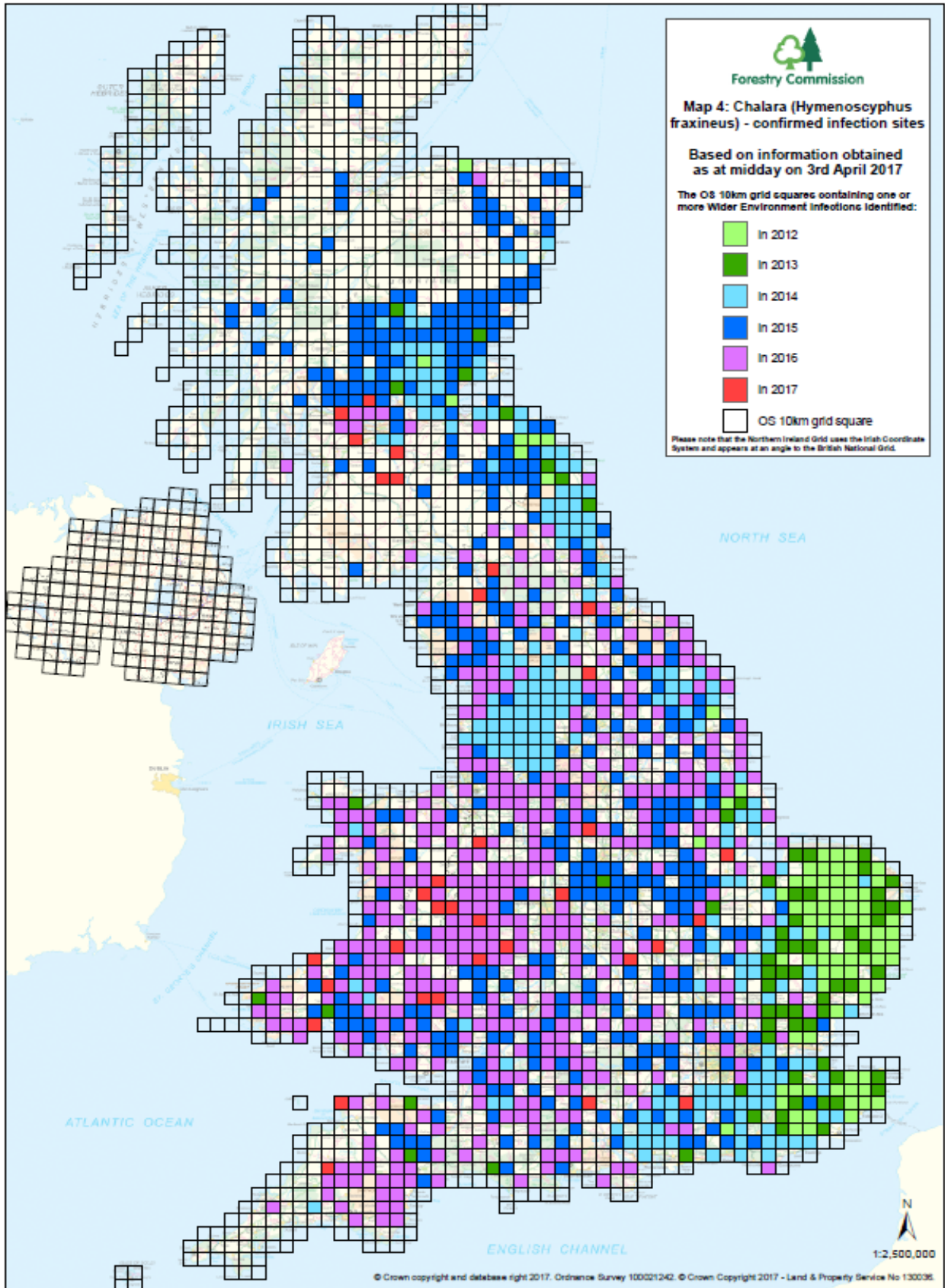
12.1. Implementation and evaluation proposals for the new EU Plant Health Regime are being developed in conjunction with Defra and the DAs, as described above, and this will include full engagement with stakeholders.

13. Recommendations

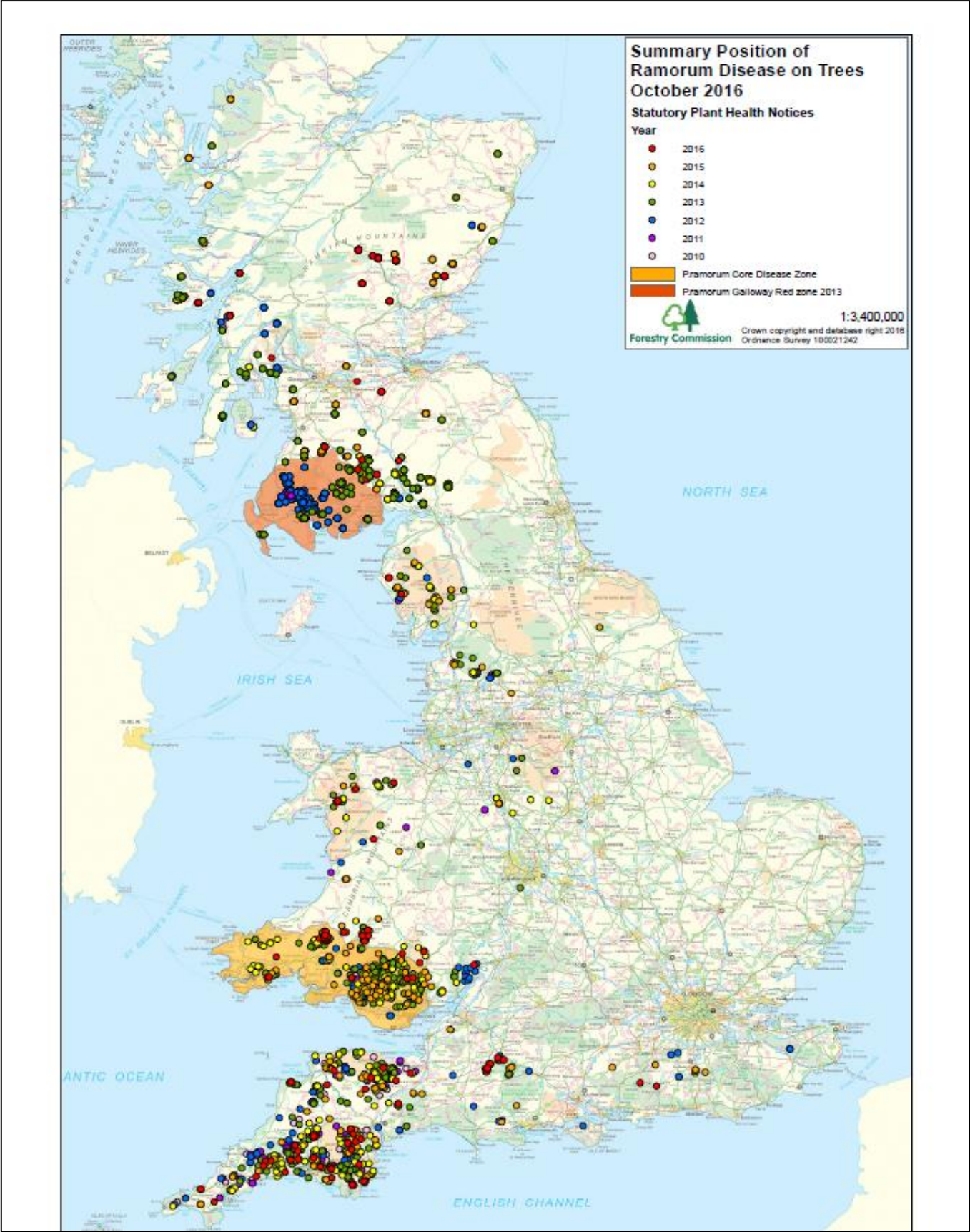
13.1. That Commissioners note the current position on plant health threats and responses to them in the UK and discuss the issues arising from it.

Roger Coppock
Head of Corporate and Forestry Support
June 2017

Annex 1 Chalara confirmed infection sites 3rd April 2017



Annex 2 Summary P ramorum position at October 2016



Annex 3 – High priority tree health risks for the UK

Table 1 – Unmitigated UK relative risk rating ≥ 100

Pest	Name	Details	Presence
Phytophthora ramorum	Ramorum shoot dieback;	Pathogen of larch and other hosts subject to EU emergency legislation. A containment strategy is in place in the UK reflecting its presence in wider environment/forestry settings in some areas. EU regulatory status is under review.	Widely present in the UK
Agrilus planipennis	Emerald Ash Borer	Damaging pest of ash, spreading in Russia. Regulated at the EU level, which will help mitigate risks associated with movements in trade, but risks associated with firewood movements need to be further assessed. Europe wide surveillance is needed, especially in countries in the eastern fringe of the EU and non-EU EPPO countries.	Absent
Ips typographus	Spruce bark beetle	The eight-toothed European spruce bark beetle is not believed to be present in the wild in Great Britain, but live adults have occasionally been trapped during routine monitoring at sites such as mills and ports handling imported wood. It could cause significant damage to Britain's Sitka spruce-based forestry and timber industries if it became established in British forests. EU regulated pest of conifers. UK has PZ Status that appears to be effectively mitigating the risk of entry.	Absent
Hymenoscyphus fraxineus	Ash dieback	Fungal disease of ash trees with low levels of tolerance in the UK ash population anticipated. Chalara management plan in place, and significant research into the pathogen and host genetics have been undertaken.	Widely present in the UK
Agrilus anxius	Bronze birch borer	Bark beetle present in the US. Recognised as a significant threat to birch but EU regulation should help to mitigate the threat.	Absent
Ceratocystis fagacearum	Oak wilt	Fungus causing impacts on oak in the USA. Research will assess the threat to UK species of oak and a review of EU regulations should be considered to strengthen protection.	Absent
Dendroctonus valens	Red turpentine beetle	Bark beetle native to the Americas but causing serious damage to pine trees following its introduction to China. Existing regulations provide protection against risk of introduction; although residual pine bark sometimes remains on packaging material and manufactured products. Research on fungal species will help better assess the susceptibility of UK pine species and to prepare a PRA. Targeted surveillance to be carried out at points of entry.	Absent
Dendrolimus sibiricus	Siberian silk moth	Serious pest of coniferous forests in Russia. Natural spread may eventually lead to introduction in the UK. In the interim measures should be taken to prevent introduction and to prepare industry for arrival.	Absent
Thaumetopoea processionea	Oak processionary moth	Pest of oak which has both plant and human health impacts. EU regulation in place to protect pest free areas. Containment strategy in place to prevent spread from infected sites in London. Stakeholder groups will be a valuable contribution to monitoring.	Present in SE England

Dendrolimus pini	Pine tree lappet moth	Native of continental Europe, Russia and Asia, where it causes periodic, large-scale damage to pine plantations. If statutory action continues, EU regulation should be considered e.g. PZ status.	Present in N Scotland
Phytophthora kernoviae		Pathogen of certain tree and shrub species; subject to a containment strategy the UK.	Widely present in the UK

Table 2 – Mitigated UK relative risk rating ≥ 60

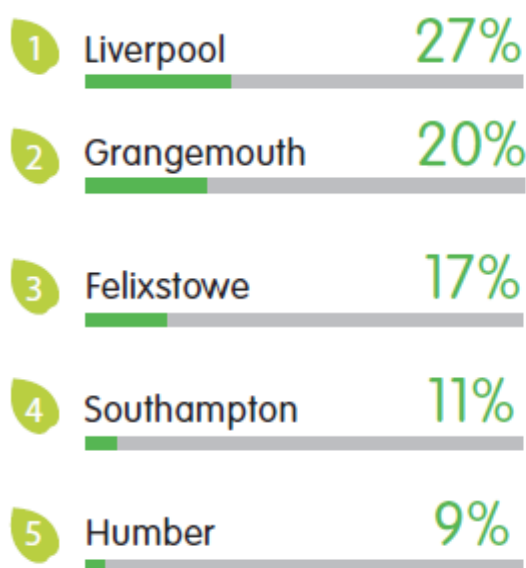
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Bacterial infection	Acute Oak Decline	Serious disorder of oaks likely to be caused by a complex of organisms. Eradication is not feasible, but good silvicultural practices could help to reduce spread and impacts.	Present from East Anglia through to the Midlands of England.
Agrilus biguttatus	Oak splendour beetle	Native beetle attracted to stressed trees and which is one of the biotic factors contributing to Acute oak decline above. Good silviculture practice can help to mitigate the decline in tree health.	Much more widely present than formerly assumed.
Heterobasidion irregulare	Conifer fungus	Fungal pest of pine present in North America and Italy. Could potentially be damaging if introduced to the UK and EU regulation should be considered.	Absent
Xylella fastidiosa ssp multiplex	Bacterium with wide host range	Bacterial pest which causes disease in a wide range of woody commercial plants such as grapevine, citrus, olive and several species of broadleaf trees widely grown in the UK, as well as many herbaceous plants.	Absent

273 INTERCEPTIONS OF NON-COMPLIANT SOLID WOOD PACKAGING AND OTHER MATERIAL

APRIL 2016 – March 2017

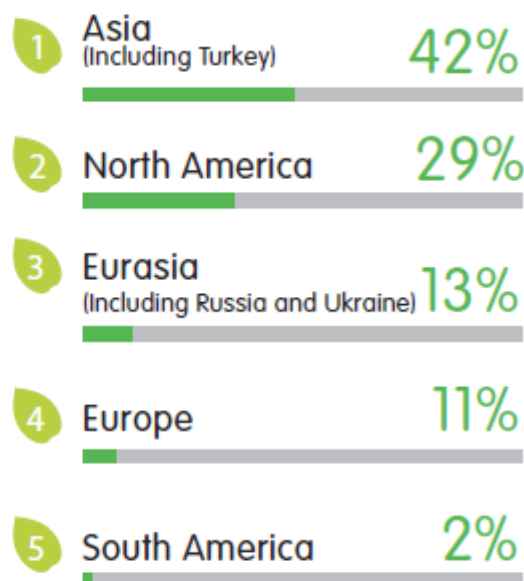
TOP 5 Ports

WHERE INTERCEPTIONS WERE MADE

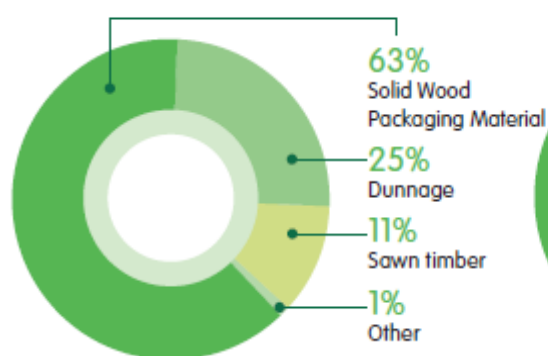


TOP 5 Regions

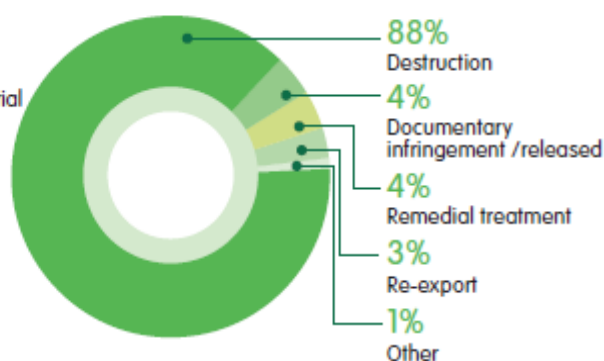
WHERE INTERCEPTIONS WERE FROM



Materials Affected



Action Taken



Forestry Commission

STOP IT!

Keep pests and diseases out of our forests and woodlands.