

4 December 2014

Paper Title	Tree Health Update (especially <i>P ramorum</i>)
Paper Reference:	NRW B B 85.14
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Purpose of Paper:	Information
Recommendation:	To update the Board on tree health issues, especially the spread and impact of <i>P ramorum</i> and the management being undertaken on the WGWE in 2014.
Decision Required:	None

Impact: To note – all headings might not be applicable to the topic	<p>Impact on the Environment: Tree health issues can have direct impacts on habitats by causing the death of key species also there can often be significant impact on the environment caused by the management of pests or diseases. <i>P ramorum</i> is expected to result in the loss of larch from Wales in the medium to longer term. Larch makes up around 8% of the woodlands and forests in Wales and provides an important element of species diversity. <i>P ramorum</i> is also a threat to bilberry, an important component of semi-natural habitats in Wales. In addition to the direct impact of <i>P ramorum</i>, there could be indirect, short-term impacts from large scale clear-felling of infected larch, in terms of landscape and water quality.</p> <p>Impact on the Economy: Economic impacts can be wide ranging from direct loss of income from tree death or increased costs associated with</p>
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	<p>disease or pest management especially where statutory notices are used. <i>P ramorum</i> can have an adverse impact on recreation and tourism related businesses in forests areas where there is a lot of larch felling. The infection of larch has resource and cost implications for private woodland owners and timber processors.</p> <p>Impact on Community: Tree health problems and their management can have major impacts on local communities. These can range from the human health issues associated directly with oak processionary moth to the loss of heritage trees caused by Ash die back. In areas where there is a large amount of larch close to communities, <i>P ramorum</i> and the associated clearance can have a significant local impact on communities and visitors.</p> <p>Impact on Knowledge: There has been an increase in new pests and diseases arriving in Britain due largely to changing trade patterns. Climate change will also have an impact by altering the behaviour of existing pests and diseases as well as enabling new ones to establish. <i>P ramorum</i> is a recent pathogen in larch and it is therefore not fully understood. The research agenda needs to take account of pathogens and pests such as this.</p>
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Issue

1. To update the NRW Board on the latest tree health issues and especially on *P ramorum* since the last paper given to the NRW Board in October 2013. To inform the Board about the work being undertaken by NRW staff as part of managing pests and diseases in Wales.

Summary

2. The management of *P ramorum* remains the most important tree health challenge in Wales. In the 2014 “season” helicopters were used again to get rapid and extensive surveillance and subsequent site visits made to over 200 suspect sites. 47 of these sites have proved positive for the disease, after laboratory tests, covering 317ha. Comparing this to the previous year’s total of over 3500ha infected it becomes clear that the impact of new disease in 2014 has been significantly lower but there still remains a major ongoing requirement to manage the existing infected sites. 2014 is also the first year that the number of sites and areas infected is higher in the private sector than on the NRW managed land. (See Annex 1)
3. NRW has been not only harvesting newly infected sites but has been continuing to harvest the existing sites especially in the south Wales valleys. By the end of October 142000m³ has been felled and dispatched to the processors which means 60% of the target for 2014/15 has been achieved with 5 months left it is therefore on track. This is part of the major change in larch production and processing that has been developed between NRW and the processors. In the first year of *P ramorum* infection 2010 NRW (FCW) harvested 54000m³ and that has now increased to a target this year of 240000m³. This development has been in response to the disease progression.
4. As part of the sustainable restructuring option presented to WG by NRW in late 2013, an additional £ 2.5 million was made available for financial year 2014/15 to manage the disease which included surveillance, works to comply with plant health notices, deal with infected trees adjacent to recreation infrastructure which might pose a risk, develop civil engineering infrastructure for harvesting and undertake harvesting of sites at reduced income (compared to predicted income).
5. It is important to note that this additional funding did not include any money to assist with the increased replanting costs being incurred as a result of the disease management.
6. WG has held a stakeholder workshop to develop a specific project –“*P ramorum* recovery plan”. NRW was represented in all of the working groups along with the private sector. The results of the deliberations are currently being finalised for presentation to the Minister. This will provide a framework for future management of the disease across Wales including providing clarity for longer term funding. NRW are currently discussing with WG the use of Rural Development Plan (RDP) funding for restocking parts of the Welsh Government woodland estate (WGWE)
7. NRW is working together with WG and other stakeholders on the Tree Health Steering Group to ensure that by developing a risk register for Wales we are aware of current and potential problems and that preventative measures are in place to act quickly and try to stop the spread.
8. The tree health team have been undertaking a wide range of surveys and engaging with other bodies across GB taking forward DEFRA and WG initiatives to develop new surveillance techniques and disease identification technologies.

Background

9. After 1st April 2013 Welsh Ministers became the competent authority as regards protection of trees and timber and regulatory control belongs to the Ministers and those authorised by them. NRW have the responsibility not just for managing the Welsh Government Woodland Estate (WGWE) but also as a regulator across Wales for most operational “on the ground” issues. Forestry Commissioners still act on behalf of WG for national matters. NRW therefore undertakes most of the surveillance for pests and diseases.
10. For Ash Dieback the tree health team has completed a number of surveys across Wales and currently responds to reports of suspect infection; however, this winter there will be further targeted surveillance as a result of increased understanding of both the disease and the time of its arrival in GB. The team will be looking at older “new” plantings and their immediate surroundings. Across GB there has been significant increase of ash dieback found in the wider environment (partly due to new DEFRA definitions) including another site in south west Wales near Narberth. (see Annex 2)
11. The tree health team has also been undertaking surveys for a disease which kills Juniper. The disease is called *Phytophthora austrocedrae* and has caused significant deaths of Juniper in England and Scotland since it was first identified in 2011. (See annex 3) The survey in Wales has shown no infection so far.
12. There are a range of other surveys undertaken as part of European legislation; these include a number of bark beetles, chestnut blight, oak processionary moth (which is present in England) and Asian longhorn beetle. Wales remains clear of these pests and diseases.
13. *Phytophthora ramorum* remains the most important disease in Wales and since the Board paper in October 2013 there have been some significant developments. The *P ramorum* Disease Management Strategy was launched by the Minister in January 2014 which set in place different management zones in Wales depending on the intensity of the disease. Management is concentrated on the leading edge of the disease spread and in new outbreak areas. This strategy enables the management of larch stands in the worst affected areas to be planned and undertaken in a structured manner which causes the least impact on the local communities and their environment whilst making best use of resources. Another important development has been the signing of the long term larch supply contracts between NRW and processors which will help to develop capacity and markets for both NRW and the private sector.

14. In 2014 the impact of *P ramorum* in Wales has been much lower than predicted by the modelling, and significantly less than previous seasons. This remains a relatively new disease and therefore it is not clear why this should be the case. It is clear that there are a number of important areas to consider i.e. the number of spores produced to spread the disease, the right conditions for spread and the uninfected stands of trees being receptive. There is much discussion amongst the researchers about the impact of summer rainfall on the disease spread. Summer rainfall in 2012 which has an impact on the 2013 disease season was over 170% of the average whereas in 2013 the relative lack of summer rainfall at approximately 70-90% of the average may account for reduced spread in 2014.
15. There have been a number of issues raised about the risk of *P ramorum* spreading to a wider range of species and causing significant damage to those species, which in turn can have an important impact on habitats or commercial forestry crops. These concerns have been reiterated following the Welsh Government's announcement of a *P ramorum* Disease Management Strategy. The strategy allows for infected trees to remain unfelled for longer periods of time in some parts of Wales. It is clear that *P ramorum* has the ability to infect species other than larch, including some species that are very important culturally, environmentally and economically in Wales e.g. Sessile oak, Silver birch, Bilberry and Douglas fir. The impact of the disease seen to date on these species is very different to the impact we have seen on larch. It is impossible to be absolutely clear about future developments of a disease that we know a limited amount about. It is therefore crucial that we maintain our strong links across the woodland and tree management sector in Wales, and through these links increase local knowledge and therefore the ability to undertake surveillance and monitoring of trees and woodland habitats such that any changes are recognised and acted on quickly. We will remain linked in to the scientists and researchers working both on the disease and the modelling of its impacts and ensure they get data as required. (See Annex 4)

Next Steps

16. We need to work towards a position of certainty on resources in order to be able to undertake business planning. We will continue to work with the Welsh Government using the "*P ramorum* recovery plan" to determine if they will provide any additional funding directly or indirectly. We will also need to consider how NRW's funding would be prioritised if the Welsh Government do not offer the funding required.
17. Operations and National Services staff are revising the old sustainable restructuring option and updating the model to produce a new bid for funding to take to the Minister. This bid will include all the operations included in paragraph 4

as well as the replanting requirement. This bid will be developed based on the current modelling of the disease and management requirements.

18. It is important that we maintain current relationships with Welsh Government and across GB with other tree health teams and researchers to develop our understanding of the disease and refine the modelling so that we can predict the seasonal impacts.

Risks

19. There are a whole range of risks associated with Tree Health and often specific to a certain pest or disease however the following risks and issues have been considered by NRW in considering the approach to *P ramorum*

- Legal Compliance
- Environmental Impact
- Social Impact
- Health and Safety
- Direct Cost to NRW
- Wider economic impact
- Sector Capacity to respond
- Sustainability / Certification status of the Welsh Government Woodland Estate
- Reputational risks

Financial Implications

20. The cost of the Sustainable Restructuring programme for *P ramorum* has been modelled and used to prepare the previous funding bid that was submitted to the Welsh Government (as presented in the board paper of October 2013). The additional funds for 2014/15 did not include replanting. The additional cost of replanting *P ramorum* sites is eligible for funding through the Wales RDP (as a response to a natural disasters). However, no mechanism currently exists to access this funding. If additional funding cannot be secured, the replanting programme will be managed within our baseline budget.
21. There is a new funding bid being prepared by Operations and National Services Staff to cover the disease management in 2015/16. In parallel, we will consider how NRW's funding could be prioritised as part of our contingency planning.

Communications

22. NRW are working closely with the Welsh Government to develop a Tree Health Communication Plan as part of the remit of the Welsh Government Tree Health Steering Group. There has been some positive media coverage including BBC journalists filming the surveillance operations and national and UK media coverage.
23. Tree Health days have been organised in conjunction with Forest Research to update the forestry sector and other land managers on the latest tree health issues. Over 120 people attended one of two events held in north and south Wales.
24. The national *P ramorum* communication plan has been revised in light of the Disease Management Strategy and NRW signing long term supply contracts.
25. Local communication plans have been developed to respond to areas with significant *P ramorum* issues e.g. Cwmcarn.

Equality impact assessment (EqIA)

26. Because of the large variation across the different pests and diseases this will have to be considered at a specific tree health level. We have considered *P ramorum* and are clear that it is not an issue that impacts on protected interest groups in different ways. It is therefore not considered that an EqIA is required.

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Annex 1 Wales *P ramorum* situation report 30.10.14

Annex 2 Ash Dieback distribution (page 9)

Annex 3 *P Austrocedrae* distribution (page 10)

Annex 4 Briefing note on risk of *P ramorum* spread to other species (pages 11 – 15)

