



Tree diseases in the UK - the RSPB's concerns

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Introduction

Diseases, pathogens and pests on the UK's trees is not a new issue. These plants, animals, fungi and bacteria can be a natural part of the wildlife cycle in native woods, but can also be seen by the forestry industry as threats to the quality and volume of timber in non-native forestry plantations. The international trade of trees can bring new pests, diseases and pathogens into the UK, some of which can harm wildlife, and the movement of young trees round the UK for planting can speed up the rate of spread of infection.

The wildlife implications of any tree diseases may be complex, and may not always be harmful.

The RSPB is working to better understand the positive as well as negative potential impacts of tree diseases on wildlife, and trying to ensure that government takes this into account when deciding on how to tackle tree diseases through research, tree felling and other measures. This raises questions about the underlying sustainability of how plantation forests are designed and managed, and concerns about what the biodiversity impacts may be of new tree species planted to replace those prone to disease. Tree health is a wildlife concern, not just a timber quality or forest industry issue.

Many of the UK's remnants of mature native woodland are already in need of remedial management to regain their wildlife value. This can include opening up the tree canopy to provide more light and space for trees and other plants to thrive, as well as to increase the amount and variety of decaying wood to help a range of plants and animals.

Tree diseases, pathogens and pests can give rise to a range of control responses from forestry regulators depending on the infected tree species, the forest management objectives, the extent and severity of impacts. These control measures in themselves could impact wildlife, as well as the pathogens, pests and diseases themselves.

The RSPB is also concerned about how many of new tree diseases may have reached the UK. We consider that the trade in plants and animals, for horticulture, agriculture and forestry needs tightening up. The practice of collecting seeds in the UK, but growing the plants in infected areas elsewhere and re-importing these trees with infection is exposing wildlife to unnecessary and preventable threats. New native woodland planting must not pose a disease threat to established wildlife in mature native woods. There also needs to be improved 'biosecurity' measures and traceability – so that anyone buying a tree to plant can be sure what it is, where it comes from, that it is disease free, and knows where and how it was grown and transported.

NB this is a developing area. The RSPB will continue to work to ensure that the wildlife of the UK's native trees and woodland is protected and enhanced. This includes considering biodiversity impacts of new tree pathogens, pests and diseases, changes in the type and spread of existing tree pathogens, pests and diseases, and how government tackles tree and forest health issues from biosecurity, tree and woodland planting and management aspects to controlling the horticultural and forestry trade in plants.

More information

- For further information on the range of tree diseases that could pose a threat in Britain, see Forestry Commission's website: <http://www.forestry.gov.uk/forestry/infd-6ABL5V>
- Forestry Commission biosecurity webpages: <http://www.forestry.gov.uk/forestry/INFD-8GYJ69>, including a leaflet on biosecurity: [http://www.forestry.gov.uk/pdf/FCMS028-guidance.pdf/\\$file/FCMS028-guidance.pdf](http://www.forestry.gov.uk/pdf/FCMS028-guidance.pdf/$file/FCMS028-guidance.pdf), detailed guidance on biosecurity in woodland management: [http://www.forestry.gov.uk/pdf/FC Biosecurity Guidance.pdf/\\$FILE/FC Biosecurity Guidance.pdf](http://www.forestry.gov.uk/pdf/FC%20Biosecurity%20Guidance.pdf/$FILE/FC%20Biosecurity%20Guidance.pdf)
- Scottish Government (SEARS) biosecurity guidance: <http://www.sears.scotland.gov.uk/DocumentView.aspx?id=133>

Information on the particular tree pathogens and diseases - from what they are, to the RSPB's conservation concerns, as well as advice on what to do if you think you find signs of infection on trees - is on following pages of this document:

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The RSPB speaks out for birds and wildlife, tackling the problems that threaten our environment. We have over a million members.

We own and manage about 8,800 hectares of woodland in the UK. Our UK forestry-related work includes advocating changes to devolved country and local policies, providing advice on conservation management to woodland owners and managers, and undertaking research into birds and other biodiversity affected by forestry practices. A summary of our forestry policy work is at: <http://www.rspb.org.uk/ourwork/policy/forestry/> including responses to recent government consultations: <http://www.rspb.org.uk/ourwork/policy/forestry/consultations.aspx>

Red band needle blight (Dothistroma needle blight)

What it is & RSPB's conservation concerns

Red band needle blight – 'Dothistroma needle blight' - is a plant disease caused by a fungus – *Dothistroma septosporum* - that attacks pine trees, including Scots pine. The symptoms are loss of the tree's needles (defoliation).

Outbreaks of *Dothistroma* needle blight have recently occurred in South West, Central and Eastern England. These outbreaks have resulted in the government ordering the felling of infected non-native Corsican pine plantations, particularly on the Public Forest Estate in England, and also stopped further forestry planting of this tree. *Dothistroma* needle blight has also been found in other non-native forestry plantations of lodgepole pine, for example in NE and North Scotland.

Dothistroma needle blight has not so far widely infected Scots pine, but this is a developing situation. Scots pine is native to Scotland, found in the remnants of ancient Caledonian pinewoods, as well as in native pinewood plantations. Scots pine is also planted as a non-native forestry tree in England.

The spread of *Dothistroma* needle blight and its potential impact on the wildlife quality of Scotland's native pinewoods is of concern to the RSPB, but it is not yet possible to determine what the threat is.

The RSPB checks its native pinewood nature reserves for signs of *Dothistroma* needle blight.

The Forestry Commission GB is monitoring the spread of *Dothistroma* needle blight, and is working with other stakeholders, including the RSPB, on examining the implications for Scotland's native pinewoods.

More information

- Forestry Commission Great Britain's website is a key source of information on *Dothistroma* needle blight: <http://www.forestry.gov.uk/forestry/INFD-74JFK>
- The Forestry Commission has produced a field guide to identifying *Dothistroma* needle blight: [http://www.forestry.gov.uk/pdf/DNB_field_guide_2012_private_sector.pdf/\\$FILE/DNB_field_guide_2012_private_sector.pdf](http://www.forestry.gov.uk/pdf/DNB_field_guide_2012_private_sector.pdf/$FILE/DNB_field_guide_2012_private_sector.pdf)

What should I do if I think I've seen a tree infected with *Dothistroma* needle blight?

Refer to Forestry Commission's advice on reporting *Dothistroma* needle blight 'Do I need to notify someone if I find the disease' in their Frequently Asked Questions:

<http://www.forestry.gov.uk/forestry/INFD-7L6E57> There are different reporting requirements depending on whether the tree is in woodland, rather than in a plant nursery or garden centre.

Phytophthora ramorum

What it is & RSPB's conservation concerns

There have been outbreaks of the 'fungal-like' plant pathogen *Phytophthora ramorum* mostly on larch trees and rhododendron in woodlands in parts of Devon, Cornwall and Somerset, South and mid-Wales, South and Western Scotland (Galloway, Mull and Craignish), Northern Ireland and the Republic of Ireland. There also have been smaller outbreaks of a similar fungal-like pathogen, *Phytophthora kernoviae*. So far SW England has seen the heaviest concentration of *P. ramorum* cases, but this pathogen still seems to be spreading.

The Forestry Commission has been monitoring the spread in Great Britain of *Phytophthora ramorum* and *P. kernoviae* – as well as other forest pathogens and diseases - and ordering the felling of infected host plants; which for *P. ramorum* have been larch and rhododendron *ponticum* (there has been one case in the Republic of Ireland of *P. ramorum* on sitka spruce under rhododendron). Forest Service Northern Ireland has been monitoring the spread of *P. ramorum* and ordering clearance of infected forestry.

The RSPB's biggest concern with *Phytophthora ramorum* would be it if were to start to infect heather habitats and blaeberry, with potential concerns for capercaillie and other priority bird species, native pinewood habitats, as well as heath and moorland. This has not happened so far in the UK.

Rhododendron can be a host plant for *Phytophthora ramorum*. The removal of rhododendron *ponticum* from native woodland as a *Phytophthora ramorum* control measure, could be a positive measure to improve the wildlife quality of native woods, for example Atlantic oakwoods. It is important that rhododendron removal in native woods is done at a large enough scale, and includes onward management of vegetation, to restore and protect wildlife.

The RSPB is also concerned that tree felling to control the spread of *Phytophthora ramorum* is carried out in a manner to minimise disturbance to wildlife.

NB *Phytophthora ramorum* is confusingly referred to as 'sudden oak death', but it is not currently a disease issue for oak trees in the UK. Note that 'sudden oak death' is a different plant pathogen from 'acute oak decline'.

More information

- Forestry Commission Great Britain's website is a key source of information on *Phytophthora ramorum*: <http://www.forestry.gov.uk/pramorun> This includes current status of spread in GB as well as control measures, biosecurity for timber and access, advice for land managers and frequently asked questions.

Forest Service Northern Ireland also recommends this website for background information.

What should I do if I think I've seen a tree infected with *Phytophthora ramorum*?

If you find or suspect a case of *Phytophthora ramorum* you should report it to:

- England – e-mail Forestry Commission England: plant_health_england@forestry.gsi.gov.uk (note the underscores, i.e. plant_health_england); telephone: 0117 372 1070.
- Northern Ireland: e-mail Department of Agriculture and Rural Development (DARD): dardhelpline@dardni.gov.uk; telephone: 0300 200 7847.
- Scotland – e-mail Forestry Commission Scotland: ddas.nrs@forestry.gsi.gov.uk; tel. 0131 445 2176.
- Wales - e-mail Forestry Commission Wales: bww.ts@forestry.gsi.gov.uk; telephonenumber: 0300 068 0300.

Juniper dieback (*Phytophthora austrocedrae*)

What it is & RSPB's conservation concerns

Phytophthora austrocedrae is a fungal like pathogen that affects juniper trees, causing juniper dieback. This is an emerging conservation concern related to potential impacts on the wildlife quality of upland juniper scrub. Upland juniper scrub woodland is an important and scarce wildlife habitat. So far there are outbreaks of juniper dieback in County Durham, Perthshire and Cumbria.

Forestry Commission GB has been working on better understanding *Phytophthora austrocedrae* as well as monitoring its spread.

The RSPB is carefully following developments with *Phytophthora austrocedrae*.

More information

- Forestry Commission Great Britain's website is a key source of information on *Phytophthora austrocedrae*: <http://www.forestry.gov.uk/forestry/INFD-8RAJZ3>
- Plantlife information on *Phytophthora austrocedrae*: [http://www.plantlife.org.uk/uploads/documents/Juniper and Phytophthora austrocedrae.pdf](http://www.plantlife.org.uk/uploads/documents/Juniper_and_Phytophthora_austrocedrae.pdf)

What should I do if I think I've seen a tree infected with *Phytophthora austrocedrae*?

Refer to Forestry Commission webpage, <http://www.forestry.gov.uk/forestry/INFD-8RAJZ3> 'What should I do if I find suspicious symptoms?', for how to report a suspected a case of *Phytophthora austrocedrae*.

Acute oak decline

What it is & RSPB's conservation concerns

'Acute oak decline' is a bacterial disease that causes dieback of oak tree branches and eventual tree death. Oak decline can occur in two forms – 'acute' and the slower acting 'chronic' oak decline.

There is a current outbreak of Acute oak decline in Central England and Wales, raising conservation concerns about possible threats to oak in native woodland; but the disease biology and likely potential conservation impacts are not yet fully understood. Acute oak decline can affect both of the UK's native oak tree species – the pedunculate oak, *Quercus robur*, and the sessile oak, *Quercus patraea*, with the former thought to be the most susceptible to this disease.

As the understanding of this disease improves, it may be possible to better understand its potential nature conservation implications.

More information

- Forestry Commission guidance:
[http://www.forestry.gov.uk/pdf/fcpn015.pdf/\\$FILE/fcpn015.pdf](http://www.forestry.gov.uk/pdf/fcpn015.pdf/$FILE/fcpn015.pdf)

What should I do if I think I've seen a tree infected with Acute oak decline?

Refer to Forestry Commission webpage, <http://www.forestry.gov.uk/forestry/INFD-8RAJZ3> 'What should I do if I find suspicious symptoms?', for how to report a suspected case of Acute oak decline.

Ash dieback (*Chalara fraxinae*)

What it is & RSPB's conservation concerns

See RSPB website: <http://www.rspb.org.uk/ourwork/conservation/ashdieback.aspx>

More information

- Forestry Commission GB website: www.forestry.gov.uk/chalara, including advice for visitors to woodland: <http://www.forestry.gov.uk/website/forestry.nsf/byunique/infd-8zkly5> & frequently asked questions: <http://www.forestry.gov.uk/forestry/infd-8w9euv>
- Forest Service Northern Ireland: <http://www.dardni.gov.uk/forests-service/index/forestry-grant-schemes-and-plant-health/private-woodlands-and-plant-health-chalara-dieback-of-ash.htm>
- Butterfly Conservation: <http://butterfly-conservation.org/48-3185/moths-could-be-at-risk-from-ash-dieback.html>
- Buglife: <http://www.buglife.org.uk/News/Ash+dieback+and+invertebrates>