

## Felling Operations Frequently Asked Questions

### Phytophthora ramorum

#### **What is *Phytophthora ramorum*?**

*Phytophthora ramorum* is an algae-like organism called a water mould. It causes extensive damage and death to more than 150 species of plants and trees.

*Phytophthora ramorum* is badly affecting larch trees.

As of 2021, over 4000 sites have been investigated and 14,400ha of larch found affected by this pathogen, on both private and public land.

This [short video](#) explains more.

#### **Is it only larch trees which are affected?**

No, *Phytophthora ramorum* has also been found in sweet chestnut trees (*Castanea sativa*) at a number of locations in southern and central England. In the USA, it is known as 'sudden oak death'. However, the genetic forms of the organism found in the UK have had little effect on our two native oak species, which are English oak (*Quercus robur*) and sessile oak (*Quercus petraea*).

As well as larch trees, which have been particularly affected by *Phytophthora ramorum*, other conifer species such as Douglas fir (*Pseudotsuga menziesii*), Grand fir (*Abies grandis*), Noble fir (*Abies procera*), and Western hemlock (*Tsuga heterophylla*) can be infected when growing near infected larch.

#### **How do you test for the disease?**

We undertake regular aerial plant health surveys and flights. They have identified significant areas of infected larch across the Wales. Once identified, Tree Health Teams work with Forest Research to collect samples and confirm the infection on the ground.

Individual branch and crown dieback are the first symptoms that are normally seen, spreading through the crown and to the stems as the disease progresses. Symptoms on the bark include resin bleeds and lesions. Resin bleeds can dry to a white crust on the bark. The inner bark under the bleeding area is usually discoloured and dying.

Trees die when the lesions become extensive on the main trunk. Shoots and foliage can also be affected. Infected shoots and foliage will have wilted, withered shoot tips with blackened needles. The infected shoots shed their needles prematurely.

## **How did the trees catch the disease?**

*Phytophthora ramorum* was first discovered in the UK in 2002 on an imported *Viburnum* plant. It can spread naturally in wind-blown rain (up to four miles) but it is the plant trade that spread this disease across the globe.

Before the widespread impact of *Phytophthora ramorum* on larch trees, there were approximately 154,000 hectares of larch planted in Great Britain, 5% of the total woodland area. Most of this has been lost and larch can no longer be planted for timber.

In Wales, larch growth is uneven. It is a dominant species in the south, where it was originally planted to supply the mining industry. Roughly 20% of crops in the south of Wales were larch crops at the beginning of the *Phytophthora ramorum* outbreak.

## **What will you do about the natural regeneration of larch in these infected areas?**

In recently felled areas, larch may naturally regenerate as dormant cones may begin to grow from the soil store.

Research is currently being undertaken by Forest Research on the effect of *Phytophthora ramorum* on saplings and the best management procedures from this will be published in the future.

Tree Health Teams will continue to undertake their helicopter surveys every year to monitor woodlands across Wales, and if new natural regenerated stands are identified through these aerial surveys, further site surveys will be conducted and tested accordingly.

Natural Resources Wales will not be planting any new larch on the [Welsh Government Woodland Estate \(WGWE\)](#)

## **Is *Phytophthora ramorum* dangerous to humans, dogs and wildlife?**

No, *Phytophthora ramorum* only affects trees and plants.

## **Tackling infected larch trees**

### **Do you have to cut them down? Isn't there a way to treat the disease?**

Cutting down trees (or 'felling') stops the spread of the disease. If the infected trees are not cut down, the disease can potentially infect other species in the locality, and we would not have any control in the spread of the disease.

Destroying the tree is the best way to slow the spread of the disease. To date there has been no effective method developed for treating the disease.

### **How big is the area you must fell?**

By law, Natural Resources Wales and private landowners must remove all larch that has been issued a [Statutory Plant Health Notice \(SPHN\)](#) by Welsh Government. The area will depend on what is covered within the SPHN.

It is important to note that the spread of the disease from 2010 has changed from year to year, depending on weather conditions. Therefore, Natural Resources Wales is undertaking the planning for the removal of all larch from the [Welsh Government Woodland Estate \(WGWE\)](#) across Wales.

### **How long will the operation take?**

Natural Resources Wales and its legacy body (Forestry Commission Wales) have been removing larch since 2010. Within the South East region, most larch crops will be removed by 2025.

The [Welsh Government Woodland Estate \(WGWE\)](#) also has a number of woodlands where agreements need to be made with private landowners to gain access to undertake felling. Making these arrangements takes time and infrastructure will sometimes need to be built in order to carry out the work. With this in mind, the larch removal programme could go on for longer.

### **What is the estimated time for operations at The Wylie, Llanbradach and West End South?**

Both Llanbradach and West End South will take about 9 months, and The Wylie Woodland will take about 18 months to complete.

The Wylie is scheduled to take longer to complete as this coupe is on steep ground, which means that conventional harvester forwarding techniques cannot be used. Instead the trees must be manually felled and winched individually up the bank to be safely processed in a processing area. The time taken to complete these types of operations is far longer and can change depending upon the degree of slope, timber quality and size and length of pull.

These timescales are only an estimation as there are a lot of factors that can change the length of time a felling takes. These factors can include machinery and operational breakdowns, nesting birds, or extraction delays. You can keep up to date with the programme of operations by emailing us at [SEForest.operations@naturalresources.wales](mailto:SEForest.operations@naturalresources.wales)

### **Working near communities**

### **Will you have to close access to the forest during felling?**

We understand how much people value their local woodland and closing an entire woodland is always a last resort. The health and well-being benefits associated with being out in the woods have been well documented and is a part of the [Welsh Government's Woodland for Wales Strategy](#).

During forest operations, we will endeavour to keep as many trails, footpaths and forest roads open to the public as possible. However, this is not always possible and there are times when areas of the woodland must be closed to ensure the safety of forest users and our forest operators.

The areas closed can often feel a little excessive to the public, but there is good reason for this. There are significant safety issues associated with the use of [mechanised harvesting machinery](#) which can result in injury or even death for machine operators and bystanders.

Members of the public are asked to obey signage associated with harvesting activities as it is there for their own safety.

### **I use this woodland every day, why can't I keep using it when I know the contractors are not in there working?**

It is not always easy to know when harvesting work is taking place. Even when the harvesting machinery isn't working, there can be other operational activity occurring within the wood. These activities also have risks associated with them. Machines can also break down and can be waiting for parts, which means that trees can be left unsafe. If a site is closed to the public, it is closed for their own safety.

### **At what time will work take place during the day, and how many days in the week?**

This depends on the site and how close it is to local communities. Generally, work will take place during normal working hours (no use of saws/machinery between 7:00pm and 8:00am; no haulage between 6:00pm and 6:00am). If the site is not close to local communities, hours can be extended. Bank Holiday and weekend working must be approved, and if the site was close to a local community, approval would not be given. However, where it has been necessary to close sites, there will be no access to the public at all times (inside and outside operational hours).

### **What machines will you be using to cut down the woodland?**

Depending on the site conditions, contractors will choose the best possible machinery to get the timber out safely. Once the timber in a coupe (or forest area) is sold to a buyer, Natural Resources Wales will undertake a pre-commencement planning meeting with the buyer to agree a felling plan and timber removal strategy. At this stage, Natural Resources Wales will ensure that all contract terms are agreed and adhered to for the benefit of the woodland and its surrounding communities.

**I'm worried about the level of noise there is going to be during the work, what are you going to do to alleviate this?**

All sites are assessed for how close they are to local communities before operating hours are agreed. Purchasers/contractors must follow certain rules, such as start and finish times for working with machinery and moving timber around to ensure as little disturbance as possible to local communities.

**Where can I walk when the forest operations are going on?**

We will always re-direct paths and Public Rights of Way where possible. However, this cannot always be done and if this is the case, you will need to find alternative arrangements for walking and other activities while the operations are underway.

Once the felling operation area is planned and agreed, Natural Resources Wales will monitor and manage any Public Right of Way or Public Footpath on site.

We work closely with the contractors on site to open pathways as soon as possible. Our rigorous Health and Safety assessments ensures the best suitable safety route for members of the public as well as contractors working on site.

Sometimes, we can keep pathways open through contractor 'banksmen' that keep watch at key safety areas around forest operations and public pathways. This cannot always be done, and each site will be managed appropriately for the conditions of the site. We ask that you always adhere to signage in place, even when you can't see or hear any machinery working.

**How will you get the timber out of the forest?**

The timber will leave the forest on timber wagons on a set route. The route will use public highways and will be chosen to ensure as little disturbance as possible to local communities.

The number of lorries is dependent on the size of the coupe and the amount of timber produced, and this can vary from site to site. When a site is close to a local community, we will restrict the number of timber wagons to a maximum of eight per day. In built up areas there will also be a further restriction on this activity to hours outside mornings and evening rush hours.

**Why can't the wood be given to local people to use and collect themselves?**

The wood is an infected material and must go to licenced mills for processing.

### **Will the felling contractors leave the site in a good condition after they complete the felling works?**

NRW works to UK Forestry Standard (UKFS), this means the site will be left safe with all remedial action taken (Public rights of way and forestry tracks and roads cleared and reinstated).

Felling by its nature is a destructive process. The site will not look beautiful immediately after felling. However once the restocking team start to ground preparation for their subsequent planting you will start to see structure and uniformity to the site as brash is piled into rows to expose the earth for planting.

### **Where can I go to find out regular updates about these forest operations works?**

Natural Resources Wales is always here to answer any queries you may have regarding the forest operations happening around you. You can get in touch with us through our [website](#) or email us at [SEForest.operations@naturalresources.wales](mailto:SEForest.operations@naturalresources.wales)

Otherwise, Natural Resources Wales will be regularly updating your Local Councillors and Community Councils about the works programme that is happening around you. Head to your Local Council website to find out further details about your local representatives.

### **Who manages forest operations outside of Natural Resources Wales land?**

All landowners that intend to undertake any felling operation must get a Felling License administered by Natural Resources Wales. These licenses go through a rigorous assessment ensuring that their work plan, re-stocking strategy and felling operations adhere to the UK Forestry Standard.

### **What measures will NRW undertake to tackle the anti-social behaviour on the mountain, in particular illegal motocross riding, quads and 4x4's, and fly-tipping?**

Anti-social behaviour such as motocross riding, quad bikes, 4x4's, and fly-tipping are societal issues affecting much of South Wales and wider than just the forest environment. NRW will continue to try and prevent access to the forest for such activities but it is very difficult to stop these anti-social users but still allow access for everybody else.

We see that the only way forward is to work with other agencies to tackle these issues, the main one being the police as they have appropriate powers to take enforcement action. We do urge all local woodland users to report illegal vehicle trespass to the police as its only with the weight of evidence they can act. The reports help to establish the picture of the best time to target area with an operation.

If residents can inform the police on every occasion using [contact@gwent.pnn.police.uk](mailto:contact@gwent.pnn.police.uk), ring 101 or use Gwent police Facebook or Twitter accounts. Please also notify NRW with the details of your report and crime reference number to [offroadinggwent@naturalresourceswales.gov.uk](mailto:offroadinggwent@naturalresourceswales.gov.uk) so we can monitor the issue.

## **Protecting wildlife during felling operations**

### **How do you safeguard wildlife during felling?**

Felling areas of woodland takes two years of planning before the work is carried out. This allows us to ensure that there is enough time to undertake all ecological surveys required of plants and animals, including [European protected species](#).

All felling is conducted in accordance with the [UK Forestry Standard](#), which outlines best practice when dealing with a number of these species. Natural Resources Wales also has its own internal conservation policies to further protect and minimise any disturbance to species found within its woodlands.

### **Why is felling taking place during bird nesting season?**

Sometimes it is necessary for operations to continue during bird nesting season (February-August). This could be due to several reasons including Statutory Health notices, site conditions and more. However, Natural Resources Wales ensures that it complies with all legislation and policy to protect wildlife during these operations.

Where this is the case, extensive surveys are conducted in the woodland to identify potential nesting birds. An exclusion zone is then placed around any nests identified, and our forestry operators will work around these areas until the birds have fledged the nest. Natural Resources Wales ensures that all European Protected Species area protected during our felling operations. We ensure that site surveys are conducted prior and during any operations on a site. Our surveyors will manage the contractors accordingly if any nesting birds are found and will be placed into exclusion zones.

[Read more about felling during bird nesting season.](#)

### **There is a heritage feature in the woodland, will it be affected by the forest operations?**

Natural Resources Wales ensures that it protects all heritage features that are on its sites. Prior to any forest operations we undertake a desk-based search of the known heritage features within the felling area using data from [Cadw](#) and the local archaeological trusts. We then survey the site in detail, if there are known heritage features within the coupe then we will mark out a buffer zone around them and this is treated as an exclusion zone for the felling operator.

We also record any unknown heritage features we find, these tend to be boundary walls, earth banks etc. We put the information about these in our coupe forms and create a map of where all the features are. The operator then will keep away from any exclusion areas during felling work.

For example, we are aware of the heritage features around the Wylie Woodland. The heritage within this woodland is quite extensive and spread across a large area, which does make marking things out on the ground more challenging, however there is clear guidance included in the coupe plans for the site and the best practice that the felling contractors should also be following. We will also cover the heritage and best practice at the pre commencement meeting and walk the site with the contractor to show them the features and disturbance free areas. Please see [here](#) of our heritage features map

If you feel that not all the features are identified in this map then please get in touch at [SEForest.operations@naturalresources.wales](mailto:SEForest.operations@naturalresources.wales)

### **Why are you removing other trees, which aren't larch?**

Occasionally, once we remove the infected larch, it can affect the stability of other tree species. After the larch is removed, we carry out safety inspections of the remaining trees, and sometimes this identifies trees which are unstable and at risk of falling.

While we always try to retain as many of the other trees as we can, such as native broadleaves, sometimes we must remove other trees as they pose a health and safety risk.

### **Future management of our woodlands**

#### **Is there a chance that larch disease will spread further once you've cut the trees down? How will you know if it is gone?**

Unfortunately, *Phytophthora ramorum* is here to stay. The felling is done in order to slow the spread of the disease through larch crops rather than stopping it completely. Lowering the levels of spores in the environment will also decrease the disease's ability to infect other susceptible species, which would be devastating to the natural environment.

Natural Resources Wales monitors the spread and reports nationally with its other associated counterpart organisations within the UK.

#### **Will the removal of 100 hectares of trees impact on the air quality locally?**

The trees that are being felled are dead or dying due to larch disease. If left, they will have no impact on air quality as they are dead. By felling the trees and restocking with a more diverse set of species they will increase their impact in relation to air quality. As trees grow to maturity, they actually sequester more CO<sub>2</sub> than mature trees. So the felling of dead



/dying trees and replanting of new trees will increase the benefits associated with air quality.

### **Why do you leave logs and brash lying around? The woodland looks messy after felling has taken place.**

The removal of the side branches and the tops of the trees ('lop and top') is part of the harvesting process. These are left on site for machines to drive on, ensuring as little ground damage as possible. The lop and top left behind also helps nutrient recycling on the site, ensuring fertility of the soil.

Standing trees are left for several reasons. They may be a different species of tree not affected by larch disease. They may be home to certain animal species, such as bats. Standing trees can also be deadwood, which can be home to a variety of specialised species not found in live wood.

### **Doesn't the brash left on site cause a fire risk in the area?**

Once a forest operation is completed, the site will be prepared for re-stocking. In this, Natural Resources Wales will sometimes move brash into rows which will aid in the dampening of any natural regeneration of competitive species such as grasses and brambles, and allow saplings planted to have a strong first year of growth.

NRW recognizes the fire risk within the Valleys and wherever possible minimizes these risks. Brash piles produced at processing bays on forest roads will be chipped, when ground preparation is undertaken windrows (brash piles, made to clear ground) will be pushed to the ground to minimize air flow and decrease heat intensity of potential fires. When designing the restocking of the sites, species composition and placement will be chosen to mitigate fire risk. The use of broadleaved edges to woodlands, increases to forest road non plated buffer zones, fire breaks etc.

Brash left behind is important to the sites nutrient return and soil preservation, as well as aiding in the preparation of the ground for re-stocking.

Find out more about the benefits of brash [here](#).

### **Why do you leave some trees that look dead?**

We aim to retain standing and fallen deadwood within any felling area. During our pre-sale surveys the areas of highest value for deadwood retention are marked on a map. These areas can include riparian zones, areas with existing deadwood or broadleaves around the felling area.

We have a deadwood policy that we use as a guide to help determine the amount of deadwood we need to retain. We will then leave large diameter fallen and standing deadwood in areas that are safe and of value to the woodland and its biodiversity.

### **What happens to all the wood?**

All our timber is sold in a fair and transparent manner to the open market. We visit the site to survey it for sale and complete a mensuration report, which gauges the amount of timber available for sale. Once the coupe (or area of woodland) is sold to a buyer, the responsibility of that site falls to the them. We, as Natural Resources Wales, maintain a strict code of conduct which ensure that the buyer adheres to any specific detail of our contract. Our Supervisory officers visit site regularly during the contract to ensure that the buyer and contractors work so our standards and contract terms.

*Phytophthora ramorum* infected larch can still be processed and used despite the disease. The trees will be transported to mills to be processed into wood-based products. Depending on how long the disease has been present in the wood determines what it can be used for. If there is significant decay it may only be appropriate for chip or biofuel. Other uses include wood products for building materials, pallets and fencing. All infected larch must be processed in licenced mills.

### **Will you plant new trees?**

Yes, after felling has taken place, a decision will be made to re-plant the woodland using tree seedlings or allow natural regeneration. Some woodlands have a good seed source and our knowledge of the woodland tells us that it will regenerate itself fairly quickly. In other areas, perhaps where we have had to clear fell large areas, we send teams in to plant new, young trees using a diverse range of species making the woodland more resilient for the future.

The species selected will be based on the [Forest Resource Plans \(FRPs\)](#) for the area which is developed in consultation with local communities. The FRP reflects the policies and procedures set out by Welsh Government and NRW, on sustainability, recreation, biodiversity, timber security and restoration of ancient woodland sites. NRW recognises the impact of pests and diseases on trees and woodlands and that pests and diseases can be introduced with planting stock therefore NRW will only purchase plants that have been grown from seed, in the UK or from cuttings derived from UK plants.

### **Can I plant a tree in the woodland?**

Natural Resources Wales uses its FRP to plan the re planting and re-stocking of felled areas.

Planting is contracted out to specialist companies that must adhere to health and safety policies and procedures. In most cases, forests are planted in high risk areas which means

that it is generally not suitable for members of the public to plant on site. However, we work closely with our communities to allow, where possible, trees to be planted by them on site. We will be working closely with representatives from your local councils and community councils to set up planting days where possible.

### **Is the local community likely to be impacted by flooding when you remove the trees nearby?**

Natural Resources Wales undertakes forest operations to minimise the impact on water environment within the catchment of the woodland. Our practices follow the requirements and guidelines of the UK Forestry Standard and which are based on research projects and the latest scientific evidence.

NRW does not carry out flow calculations to look at actual volume of water that flows of a forestry site. What NRW does look at the area of trees felled with a catchment and work out the % loss of tree cover and the impact that may have on surface water runoff. This process has been carried out for all the operational woodlands.

In this Forest Operations programme, most of the water courses drains straight to the River Sirhowy, so there is nothing that should impede the flow of water off site. There is however a culvert on the disused railway track could be affected by this, but no properties appear at risk.

We will be speaking to the owner of this culverts about maintenance and monitoring while the work is being carried out. Whilst we may be able to manage the culverts and off site drainage during operations the fact we must bare in mind above everything else is that we cannot mitigate against the huge levels of rain we are currently experiencing with these storm events.

Natural Resources Wales has recently completed a report on the recent impacts of large rainfall events in 2020, and you can read more about our findings in this [report](#).

### **What happens to all the Public Rights of way and other footpaths on the site?**

For public safety the Public Rights of Way will have temporary closures on them while felling operations take place. Due to the scale of the site we hope that closures to all paths can be phased and there will be a rolling programme of closing and reopening. Once felling is complete PROW will be reinstated.

There are numerous desire lines within the woodland, post felling when the landscape will look very different, we will look to work with the community to rationalize these and develop a local footpath network.

We ask that the users and local communities to the woodland adhere to signage that will be placed along every threshold point during the forestry operations.

### **What are you going to do with all the Mountain Bike Trails which are in the woodland?**

We are aware of extensive MTB trails that have been created throughout some of these woodlands, these trails have no formal permission from Natural Resources Wales and our operations will cause significant disruption to the network over the period of the works.

Our Land Management Team will ensure that all these trails are mapped prior to our operational works. Whilst Forest operations are underway, these trails will have to be closed and our Forestry officers will be updating the trails with signage and closure notices as required. These are closed for health and safety reasons and we cannot allow the trails to remain open during any operational Works on site.

During the operations we will not maliciously try to damage the trails however the nature of the work we have to carry out will inevitably lead to significant damage to them. Our main objective is to keep everyone safe during the essential forestry operations however we also hope to be able to engage and work with the community with regards to the trails during and after the operational works for potential future developments on site.

### **Why is it important that visitors keep to paths and clean their boots?**

*Phytophthora ramorum* is spread by water borne spores. This means that mud on your boots and clothing can spread the disease. [We encourage you to wash your boots and clothing at home after visiting our woodlands.](#)

### **How can I find out more?**

Do you have a query that hasn't been answered above? Please get in touch with us at xxx and we would be happy to discuss any further queries with you.