Hello Network!

This is the third edition of the Wales Sentinel Network newsletter.

This newsletter is aimed at supporting the 22 sentinel sites across Wales who have signed up to the Wales Sentinel Site Network, but please feel free to share with other interested parties. We would welcome contributions to future newsletters, please contact Daniel.Wood001@gov.wales for further information.

An APHA perspective - Plant Health Inspections

Pestalotiopsis on Sequoiadendron sempervirens (Coastal Redwood).

The Sentinel Sites in Wales were developed from a pilot project between the senior Plant Health & Seeds Inspector for South Wales and the Welsh Government to monitor environmentally sensitive sites, providing an early warning system for emerging Plant Health issues. The definition of 'Sentinel' is a Guard whose job it is to stand and keep watch and that is what we do except that we walk and look!

The project was officially set up in 2018 when a Sentinel Site was selected for each county or principal area of Wales.

The Sentinel sites unite the North and South Wales Plant Health teams to provide information about pest and disease outbreaks to the Welsh Government. The inspections of all the sites in Wales involves between 6 and 7 Plant Health & Seeds Inspectors.

Each Sentinel site is visited twice a year, the first in spring around April/May time and the second as autumn approaches and ideally before the leaf drop in September or October.

Each Sentinel site is unique and therefore must be inspected in an appropriate way for the plants and habitat which it provides.

Since 2018 a route around each site has been developed which enables the visiting Inspector to monitor the same plants twice a year so that any change can be recorded. The plants chosen to be monitored can be key to that site such as a Sequoia or Oak or other plant species which are particularly at risk from a new pest or disease threatening to enter Wales.

This doesn't mean that everything else gets overlooked. Inspectors always have their eyes open to other plants or trees that can be seen during our inspection visit. If there is something of concern identified, samples of insects or plant parts are sent to the FERA Science laboratory for identification and diagnosis.

Quercus robur (English Oak) showing dieback from unknown reasons.

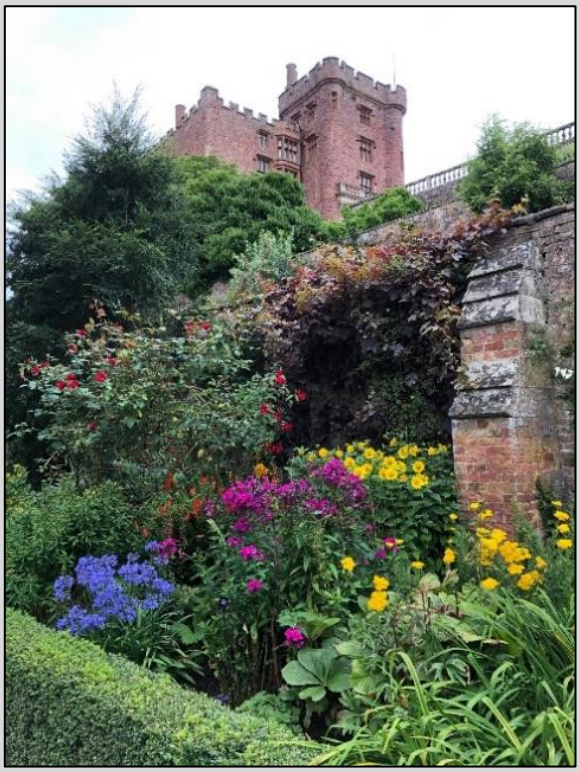
The photos within the newsletter show some examples of what plant health inspectors have found during site visits this year.

Sirococcus tsugae on Cedrus atlantica (The Atlas Cedar).

The inspection team record each site visit by taking photos and making notes using a Field App on mobile phones which provides easy access to look back at the same plants and trees over a period of time. Any samples sent to the lab are also recorded on the Field App and via the Plant Health web site eDomero.

The team also specifically monitor the environmental impact of *Phytophthora ramorum* on susceptible species such as Larch and Rhododendrons and now we are on the lookout for the newly recognised *Phytophthora pluvalis* first identified in Cornwall in September 2021 which is known to infect Douglas Fir and Western Hemlock.

All environmental visits are carried out with full biosecurity measures being implemented by Inspectors. These include having clean and disinfected boots and sampling equipment before we start, and we are mindful to clean any cutting equipment between taking samples so that infections are not spread. We also clean and disinfect our boots at the end of a visit because even if infections are not found, there could be soil borne pathogens which could be unintentionally moved from site to site. More advice can be found at: https://www.gov.uk/guidance/prevent-the-introduction-and-spread-of-tree-pests-and-diseases#tree-alert



The herbaceous borders at some sites such as this one at Powis Castle also provide a place to survey other plants at risk, for example, to the threat of *Xylella fastidiosa* being introduced in Europe. This disease has a very large host range and would be devastating to the UK horticultural industry as well as passionate gardeners everywhere. Climate change is increasing the risk of this Mediterranean disease and other pests becoming established in the UK. For more information, please see https://www.rhs.org.uk/disease/xylella-fastidiosa.

As a team, the plant health inspectors get together to discuss what we have seen at the different sites and compare sample diagnosis. We are also working to nurture communications with other experts who work on trees and plants in the Welsh environment such as the National Resources Wales team and Forest Research. Recently surveillance traps have been placed at Sentinel sites across Wales as a result of a collaboration with the Welsh Plant Health Surveillance Network (featured in the October 2022 newsletter) to look for possible introductions of unwanted pests. During these inspections, if we find anything unusual, Forest Research will be notified by means of the Tree Alert web site.

Diolch yn fawr to all members of the Welsh teams for their contribution to the Wales Sentinel Site Project. They are Ann Payne, Gareth Davies, Kevin Izzard and Molly Hammond in the South and Mike Bambrick and Lauren Waldron in the North. Plus, of course, all the Gardeners and Park Wardens at each site who are always keen to help us and talk to us about the plants and trees they see every day!

By Carolyn Williamson, APHA Inspector.

Additional projects/events

Plant Health Week

Plant Health week takes place from 8 - 12 May 2023 and the 2nd International Day of Plant Health is on the 12th May which focuses on stopping the spread of plant pest and diseases, ongoing plant health activities, research and the global importance of plant health. Welsh Government have published a report into public attitudes to plant health which can be accessed here. Tweets have been published highlighting the Sentinel Site network and our recently created animation. (Welsh - https://vimeo.com/730340482).

Plant Biosecurity Strategy

The Plant Biosecurity Strategy for Great Britain 2023-2028 was published in January. It sets out a five-year vision for plant health, consisting of an action plan to secure national biosecurity, protect native species and drive economic growth. It positions the UK as a global leader in plant biosecurity, setting out a vision to create a new biosecurity regime and bio-secure plant chain, which will safeguard food security and help mitigate the effects of climate change. It comes following updated figures which show that plants provide an annual value of £15.7 billion to the United Kingdom.

Interpretation board at Bodelwyddan featured in the Biosecurity Strategy for Great Britain 2023-2028.

The Strategy outlines commitments to deliver a new vision for plant biosecurity in Wales and across Great Britain. It has 4 key outcomes:

1. A world class biosecurity system
2. A society that values healthy plants
3. A biosecure plant supply chain
4. An enhanced technical ability

The Strategy was published on the 9th of January 2023 by Defra, Welsh Government, Scottish Government and the Forestry Commission and was accompanied by tweets and a video message from Lesley Griffiths, Minister for Rural Affairs and North Wales, and Trefnydd. Lesley Griffiths, the Welsh Government Minister said:

"*The Plant biosecurity Strategy emphasises our commitment to protect the health of our plants. Plants are the foundation of our ecosystems and provide life to the whole food chain. The strategy outlines what we will do, working with others, to further protect this vital resource."*

Invasive Non-Native Species Strategy

The Great Britain Invasive Non-Native Species Strategy 2023-2030 was published in February.

The refreshed Strategy provides a framework within which the actions of Defra, Scottish Government and Welsh Government, our agencies and external partners can be better co-ordinated to deliver the most effective response to preventing, eradicating and managing invasive non-native species. It aims to ensure improved integration with other biosecurity regimes such as for plant health and to take greater account of the increased risks posed by invasive non-native species as a result of climate change.

Example of Himalayan balsam.

An independent review of the existing 2015 Strategy was commissioned in 2020. The findings of this review, which were published in January 2021, have informed the development of the refreshed Strategy. The overarching aim of the Strategy is to minimise the risk of introduction and establishment and reduce the negative impacts of invasive non-native species in GB through a strong partnership approach. This Strategy continues to follow the Convention on Biological Diversity hierarchical approach, which emphasises prevention, followed by early detection and rapid response, and finally long-term management and control.

Invasive Species week

Invasive Species Week will take place from the 15 – 21 May 2023. Each year organisations across the UK, Ireland, Jersey, Guernsey and Isle of Man work together to raise awareness of the impacts of invasive non-native species. Visit the GB Non-Native Species Secretariat website or Wales Resilient Ecological Network (WaREN) blog for more information.

Action Oak Research Report

Example of an Oak tree. Photo credit: Action Oak/Georgina Colman.

Action Oak work with partners to fund the vital research and monitoring of threats facing the UK's native Oak trees. These include, Oak processionary moth, acute oak decline, root-attacking species of honey fungus and powdery mildews. An annual report has been generated to provide an update on Action Oak supported research to devise real solutions allowing the safeguarding of our Oaks for generations to come.