

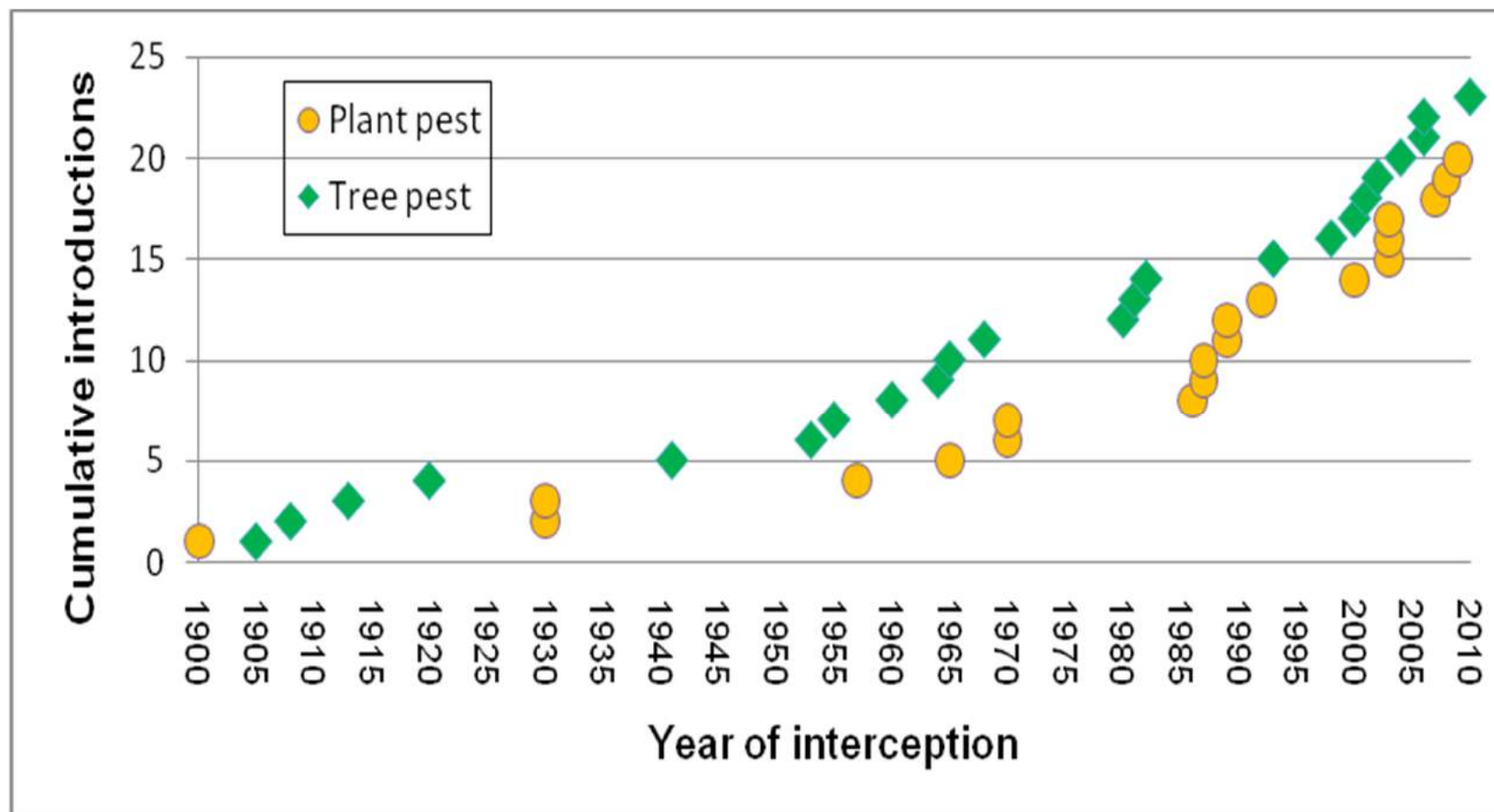


**Cyfoeth  
Naturiol**  
Cymru  
**Natural  
Resources**  
Wales

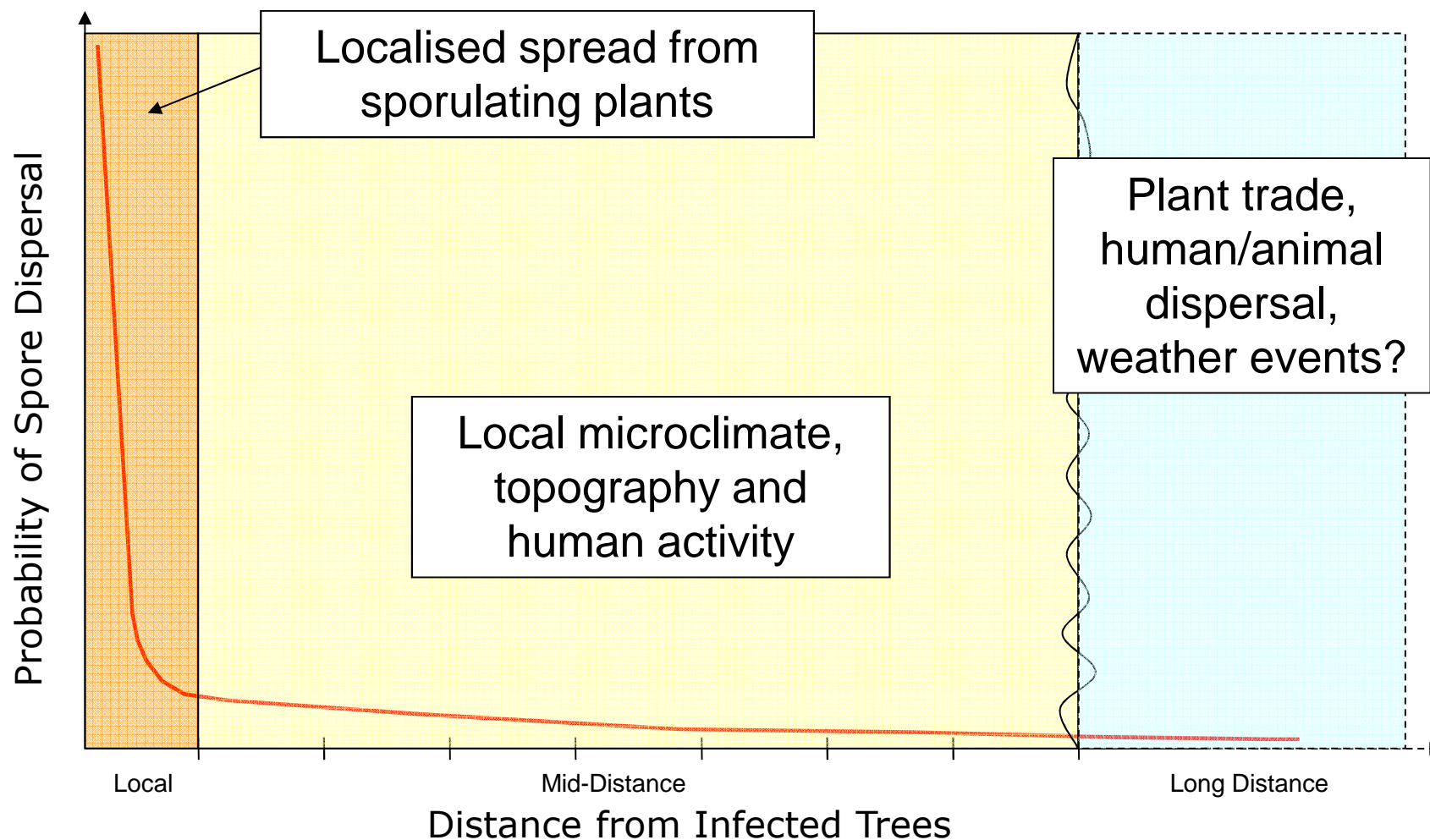
# Plant Health Update

Sam Milner  
Forest Health Surveyor  
Natural Resources Wales

## Arrival of damaging pests and pathogens in Britain



# Probability of Dispersal



## Why are we getting more invasives?

- Increases in global trade including plants
- More exotic sources and more exotic plants (China, Southern hemisphere)
- Routinely importing larger plants
- A plant health system built on visual inspection and known risks (i.e. already on the list)



## Dockside Inspections



- Felixtowe Port
- Capacity for 5 million containers per annum
- Stacking space for 66,000 containers
- 85% of all containers contain wooden packaging



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# **Sudden Oak Death** **(*Phytophthora ramorum*)**



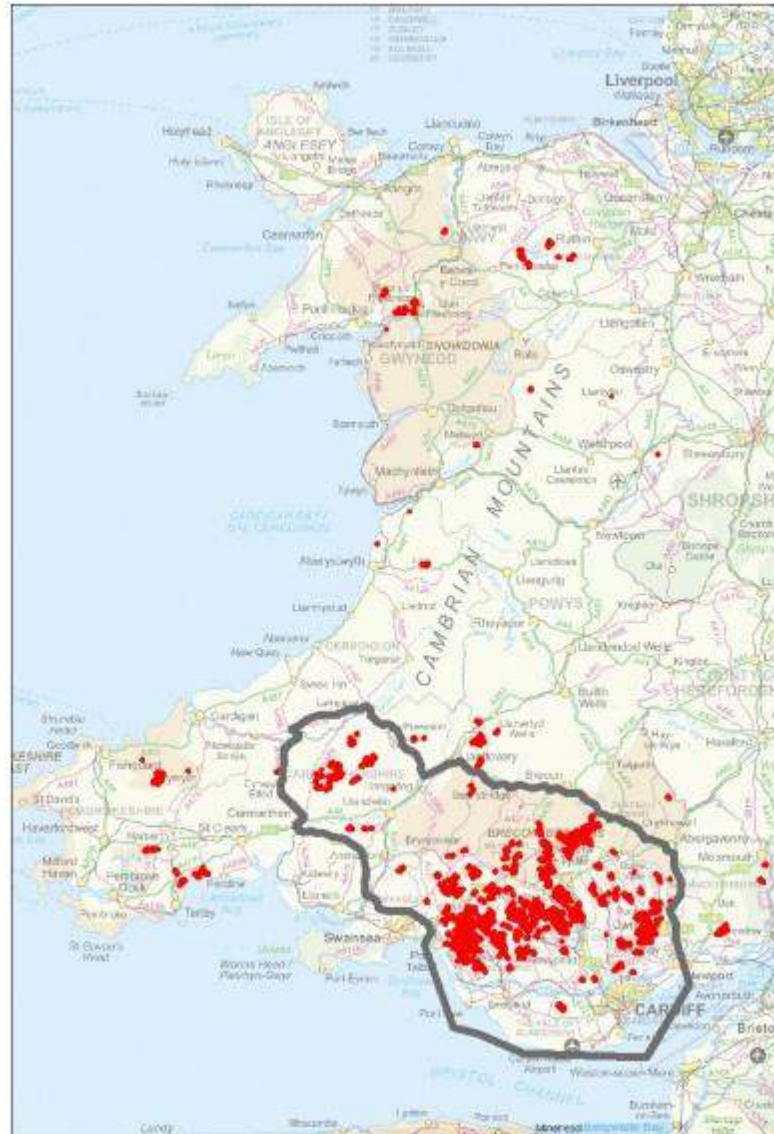
## Distribution

Around 3,000 ha  
of new infection in  
Wales in 2013,  
over 2 million  
larch trees to be  
felled

Around 6,600 ha  
in total

5,400 ha - WGE

1,200 ha - Private



New strategy  
January 2014

Core Disease  
Zone – 2,800 ha  
of SPHNs  
rescinded

Owners in CDZ  
wishing to fell  
infected Larch will  
require FLA

SPHNs issued as  
normal outside  
CDZ



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# Symptoms





# Symptoms



## Susceptible species & Restocking

- *P. Ramorum* has a host range of over 160 species – care must be taken when choosing species to replant on previously infected sites
- Spores can survive in the soil for 3 to 5 years under a wide range of extreme climatic conditions
- Large quantities of brash from infected material left on site also represents a risk of fresh infection
- Most of the species affected by *P. ramorum* do not produce fresh spores
- The main species to avoid replanting are: Larch, Grand Fir, Douglas Fir, Western Hemlock, Sweet Chestnut, Beech, Ash, Southern Beech, Oak and White Willow.

## Other Phytophthoras

*P. lateralis* – Lawsons Cypress. Cases in England, Scotland and N. Ireland

*P. austrocedrae* – Juniper. Cases in Cumbria, Durham, Devon and Scotland

*P. cinnamomi* – Many, including Sweet Chestnut, Beech and Oak. N. America, Australia and mainland Europe

*P. pseudosyringae* – Southern Beech. Cases in England

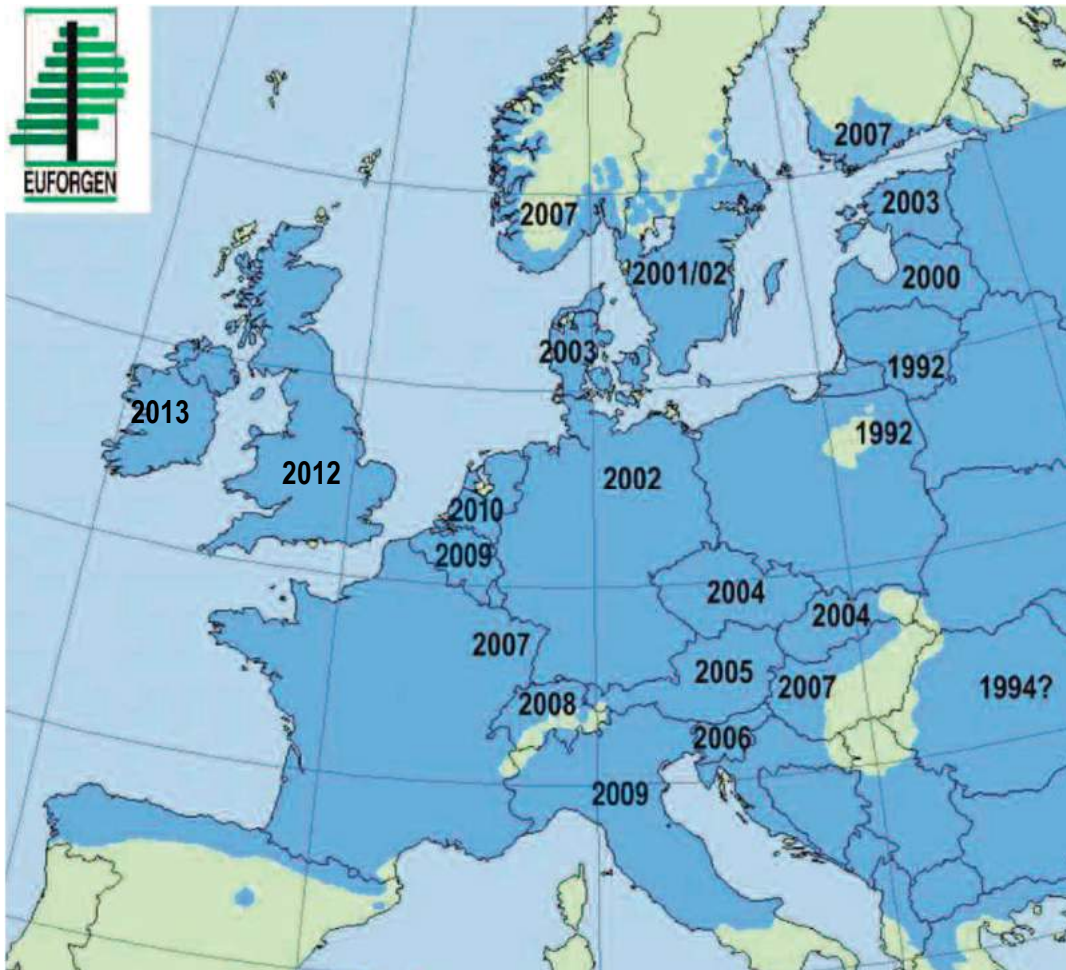
*P. cambivora* – Sweet Chestnut, Beech, Rhododendron. N. America and Southern Europe

*P. alni* – Alder. UK, Europe and N. America

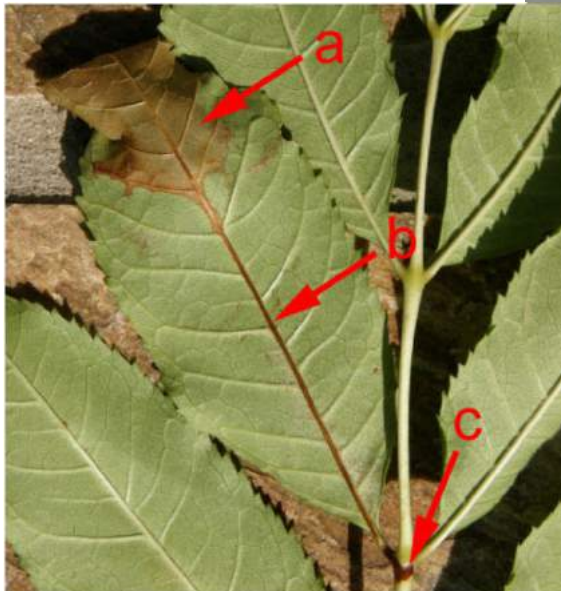
## Ash Dieback (*Chalara fraxinea*)



# Spread of Chalara 1992-2013



## Life Cycle and Symptoms





# Symptoms



## Chalara Strategy

- Reduce rate of spread
- Develop resistance
- Public engagement and surveillance
- Build resilience



## **Emerging threats**

# Asian Longhorn Beetle



- Wide host range
- Beetles tend to fly to nearest tree but can travel 2km
- 2 to 4 year life cycle
- Beetle emerges in summer

# Asian Longhorn Beetle

Around 2000 trees cleared

67 trees infested with  
around 250 larvae  
recovered

Likely to have been present  
for 4 years

Monitoring and surveillance  
including pheromone  
trapping underway





# Oak Processionary Moth





# Oak Processionary Moth



- More information can be found at:
- [www.naturalresourceswales.gov.uk](http://www.naturalresourceswales.gov.uk)
- [www.fera.defra.gov.uk](http://www.fera.defra.gov.uk)
- [www.forestry.gov.uk](http://www.forestry.gov.uk)

Thank you for listening

