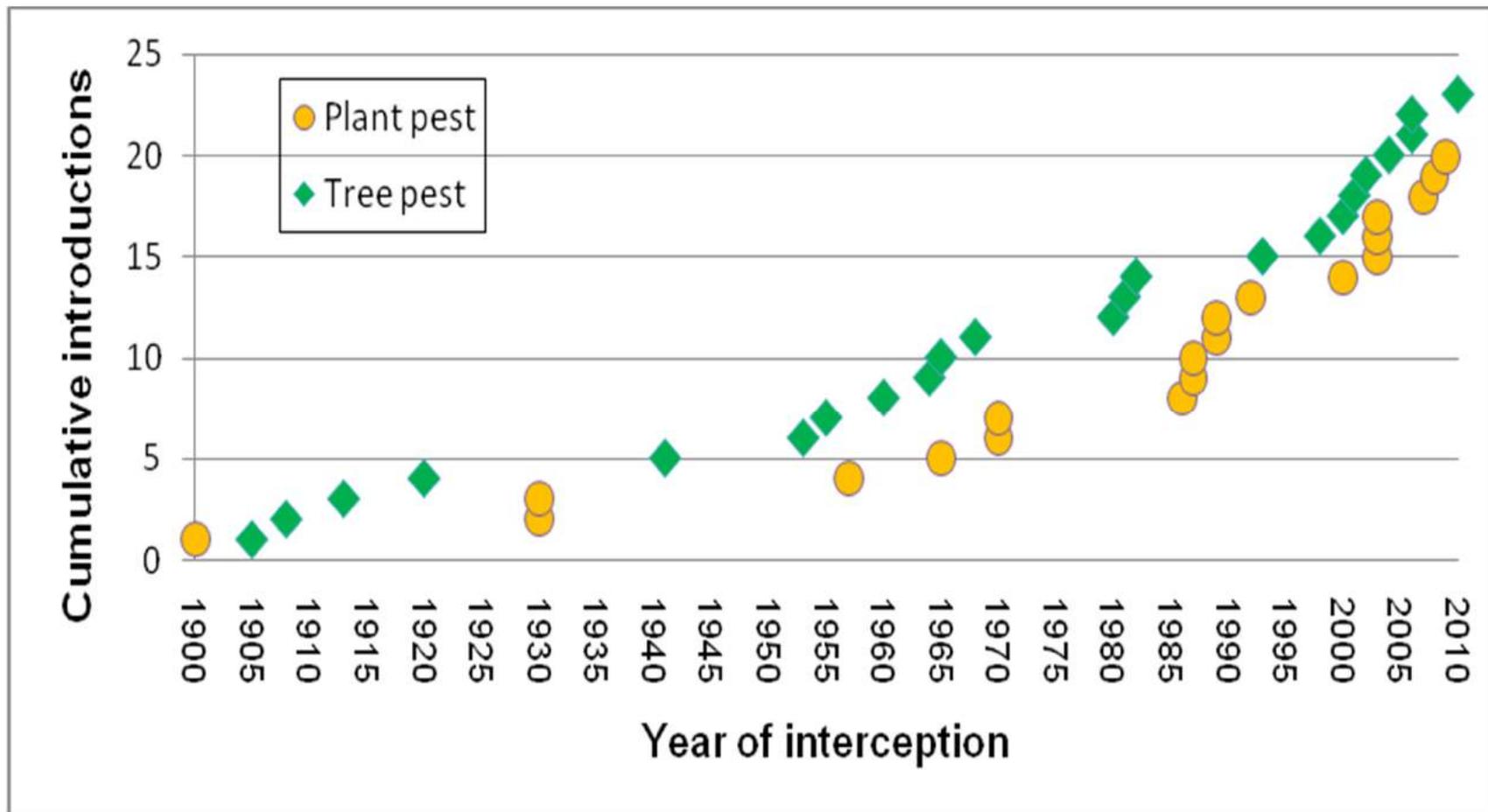




Plant Health Update

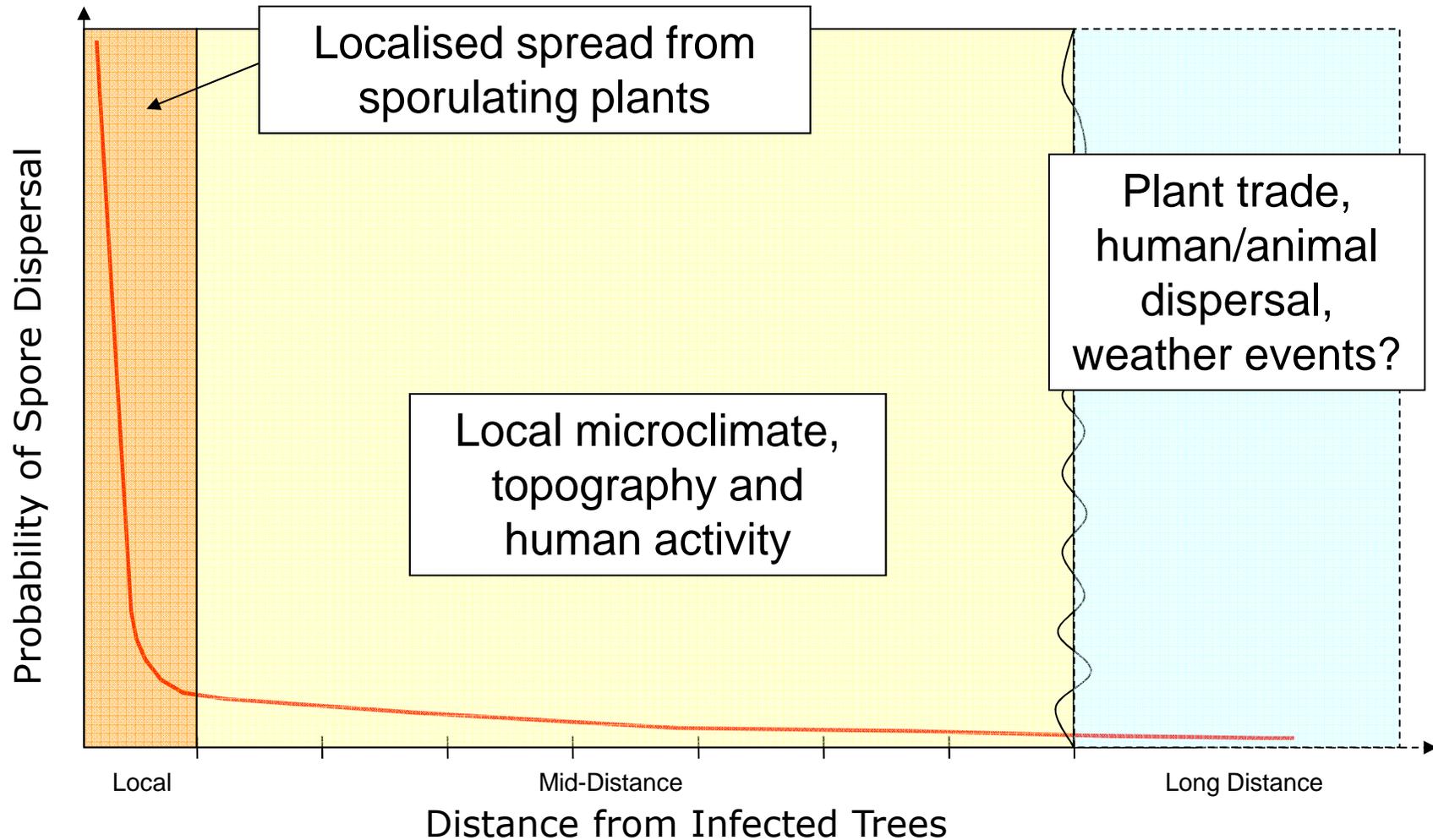
Sam Milner
Forest Health Surveyor
Natural Resources Wales

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*)

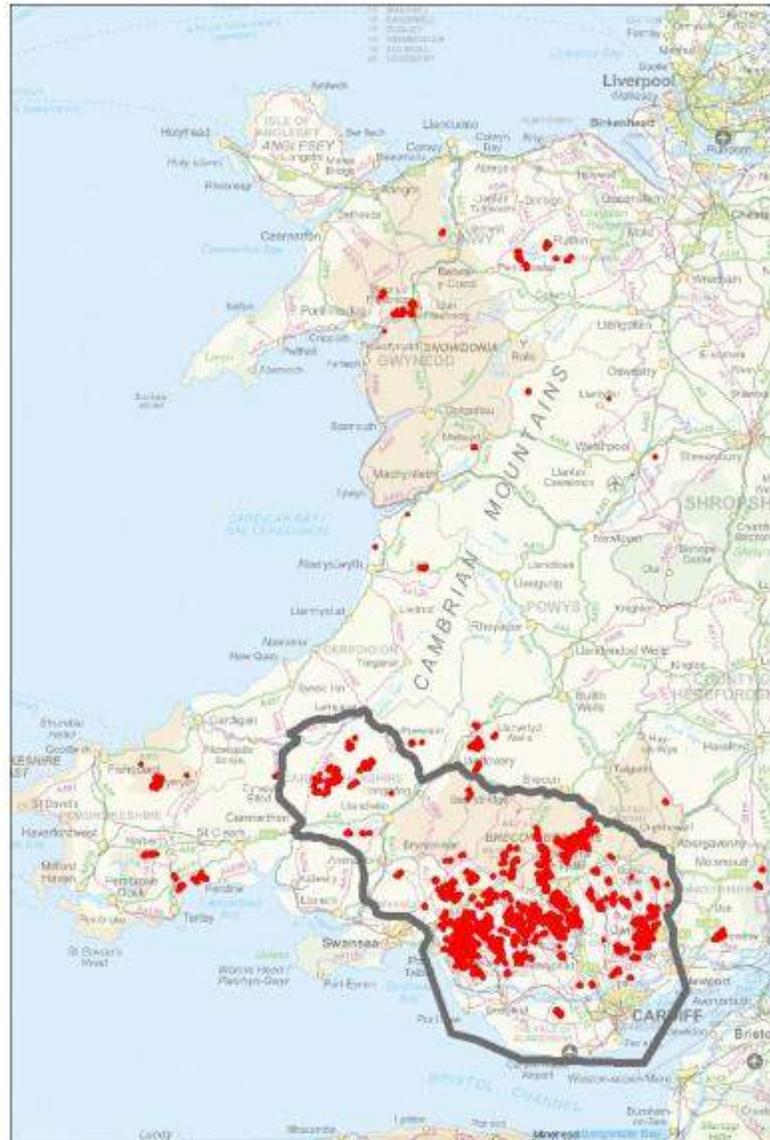
Distribution

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rescinded

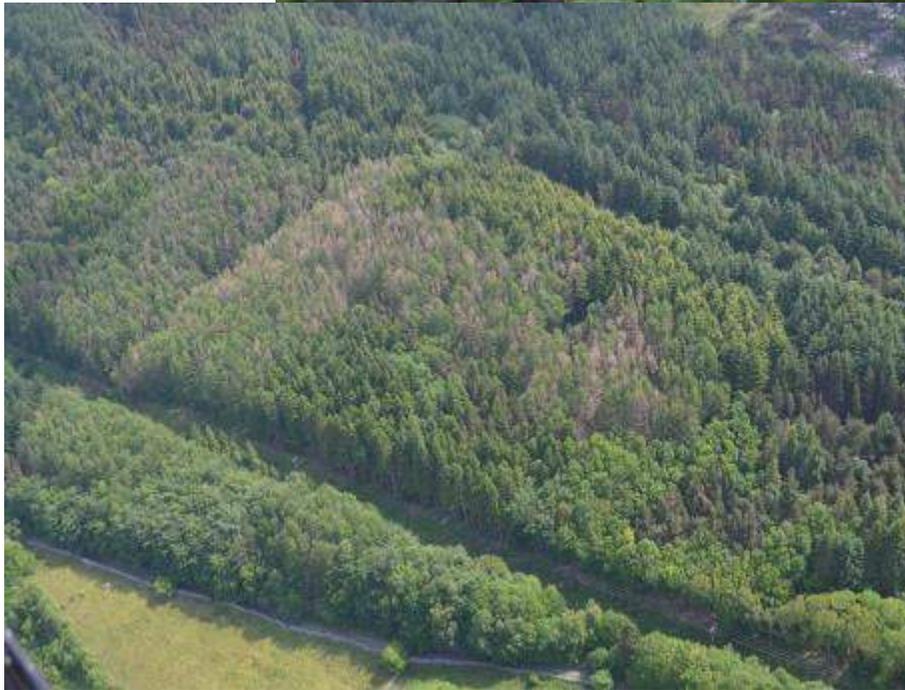
Owners in CDZ
wishing to fell
infected Larch will
require FLA

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

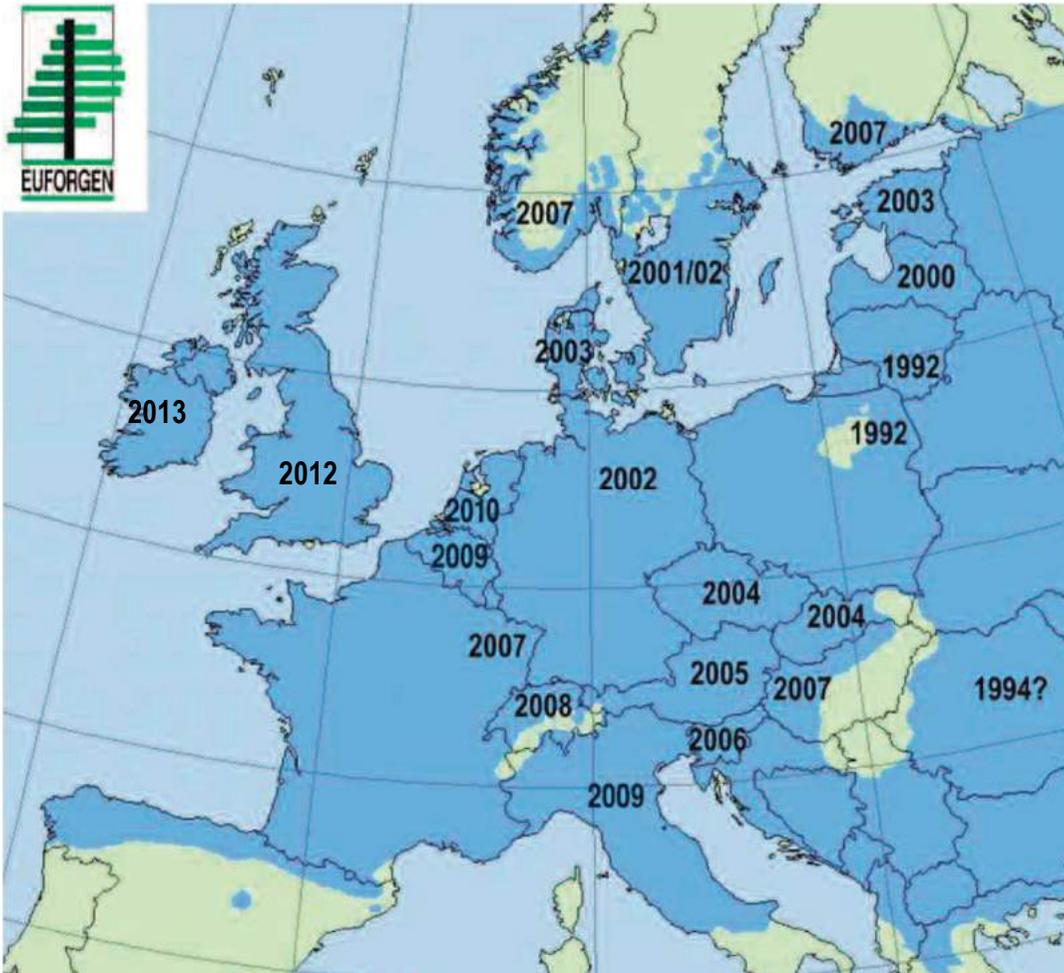
P. alni – Alder. UK, Europe and N. America



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Ash Dieback (*Chalara fraxinea*)

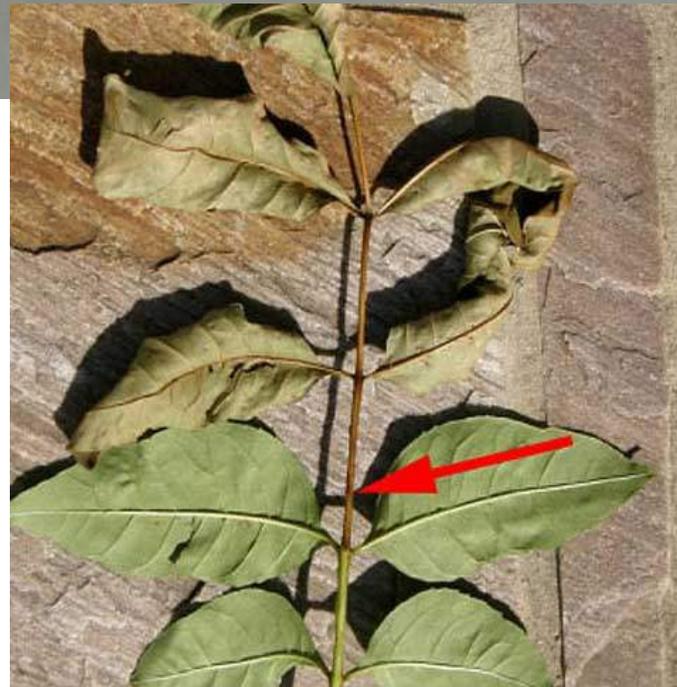
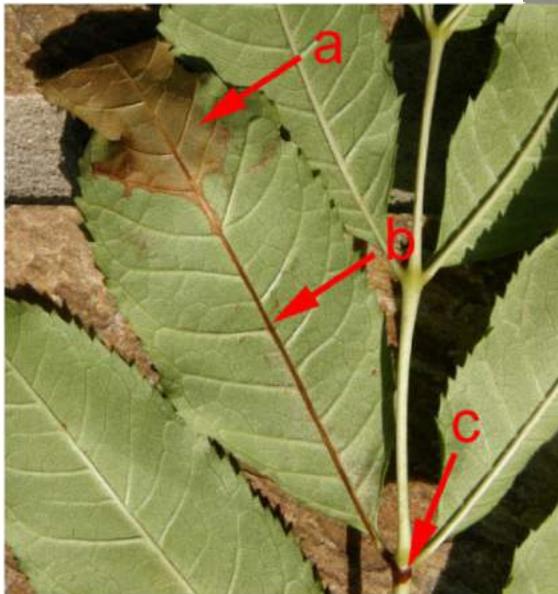
Spread of Chalara 1992-2013





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Life Cycle and Symptoms



Symptoms



Chalara Strategy

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



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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
- www.fera.defra.gov.uk
- www.forestry.gov.uk

Thank you for listening

