

# James Roberts

## Biosecurity Officer - Arboriculture



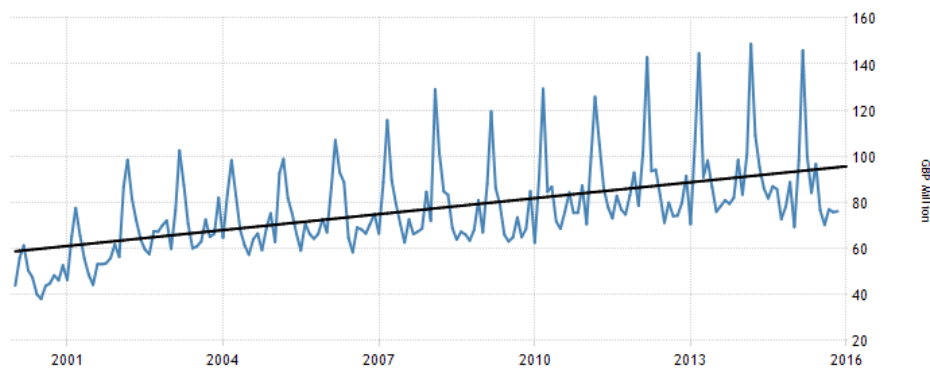
*“There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns – the ones we don't know we don't know.”*

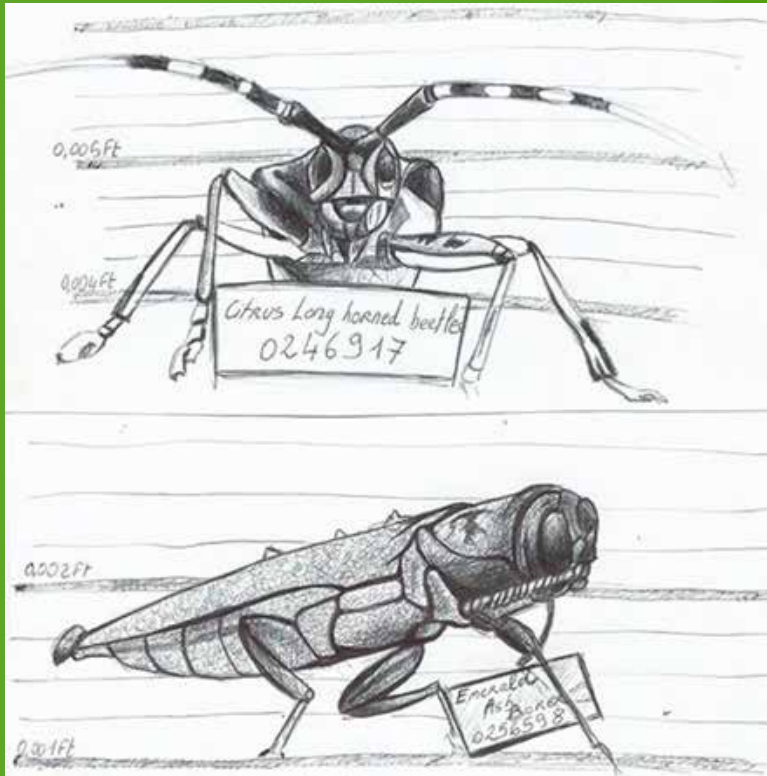
Donald Rumsfeld  
February 12, 2002

- Acute oak decline
- Chalara dieback of ash
- Chestnut blight
- Dothistroma needle blight
- Dutch elm disease
- Horse chestnut bleeding canker
- Massaria Splanchnonema
- Phytophthora alni
- Phytophthora austrocedri
- Phytophthora kernoviae
- Phytophthora lateralis
- Phytophthora ramorum
- Asian longhorn beetle
- Great spruce bark beetle
- Horse chestnut leaf miner
- Oak Processionary Moth
- Oriental chestnut gall wasp
- Pine tree lappet moth



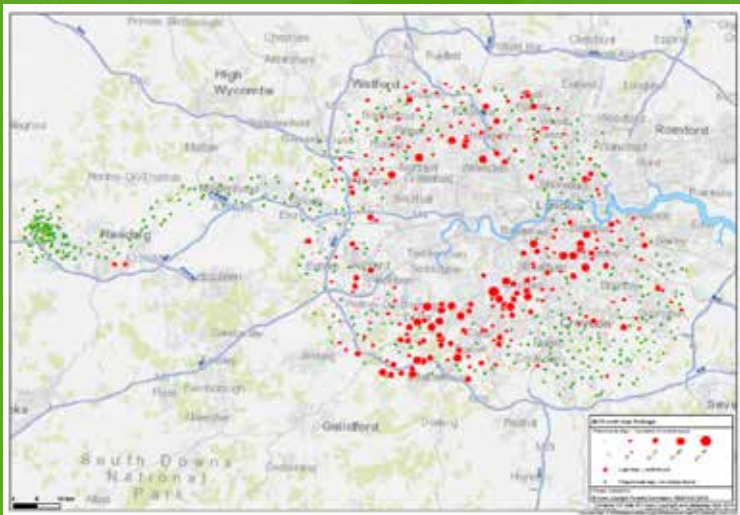
UK IMPORTS OF LIVE TREES & PLANTS





- Bronze Birch Borer
- Citrus longhorn beetle
- Eight-toothed European spruce bark beetle
- Elm yellows phytoplasma
- Emerald ash borer
- Pinewood nematode
- Pine processionary moth
- Plane tree threats
- Xylella fastidiosa

# Things we don't know



Picture courtesy of Observatree  
[observatree.org.uk](http://observatree.org.uk)

# Things we're looking out for



Courtesy of APHA. Crown Copyright.

# Control measures?



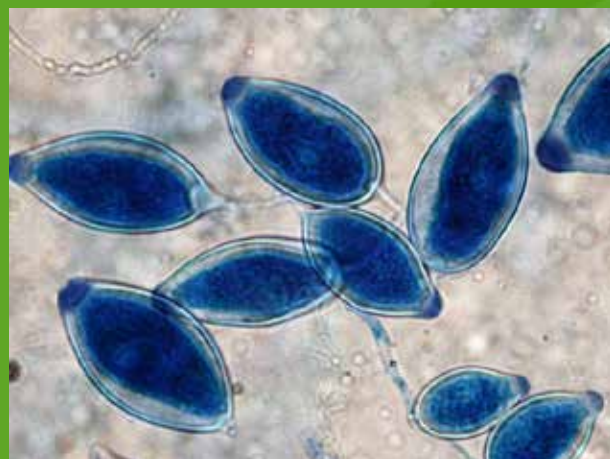
*Phytophthora kernoviae*



*Phytophthora ramorum*



Asian Longhorn Beetle



Courtesy of APHA. Crown copyright



# Size Matters...



## *Phytophthora ramorum*

Average length of a *P.r* sporangia = 43.6  $\mu\text{m}$

Which is 0.0436 mm

So, pretty small..



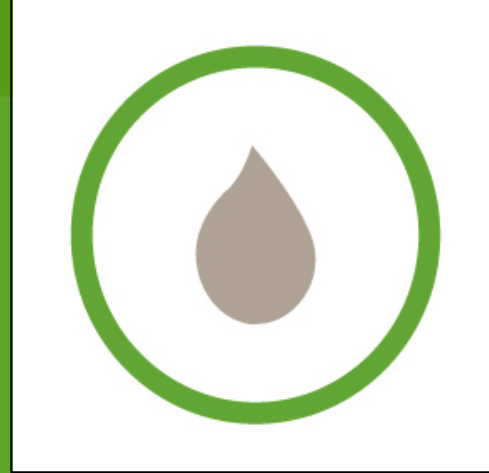
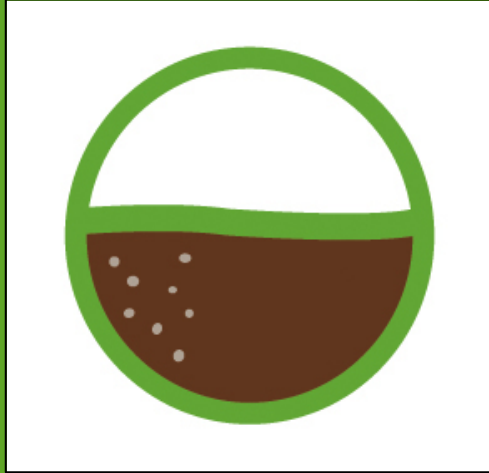
## Oak Processionary Moth

Egg plaques typically 2-3cm long  
Containing 200 – 300 eggs

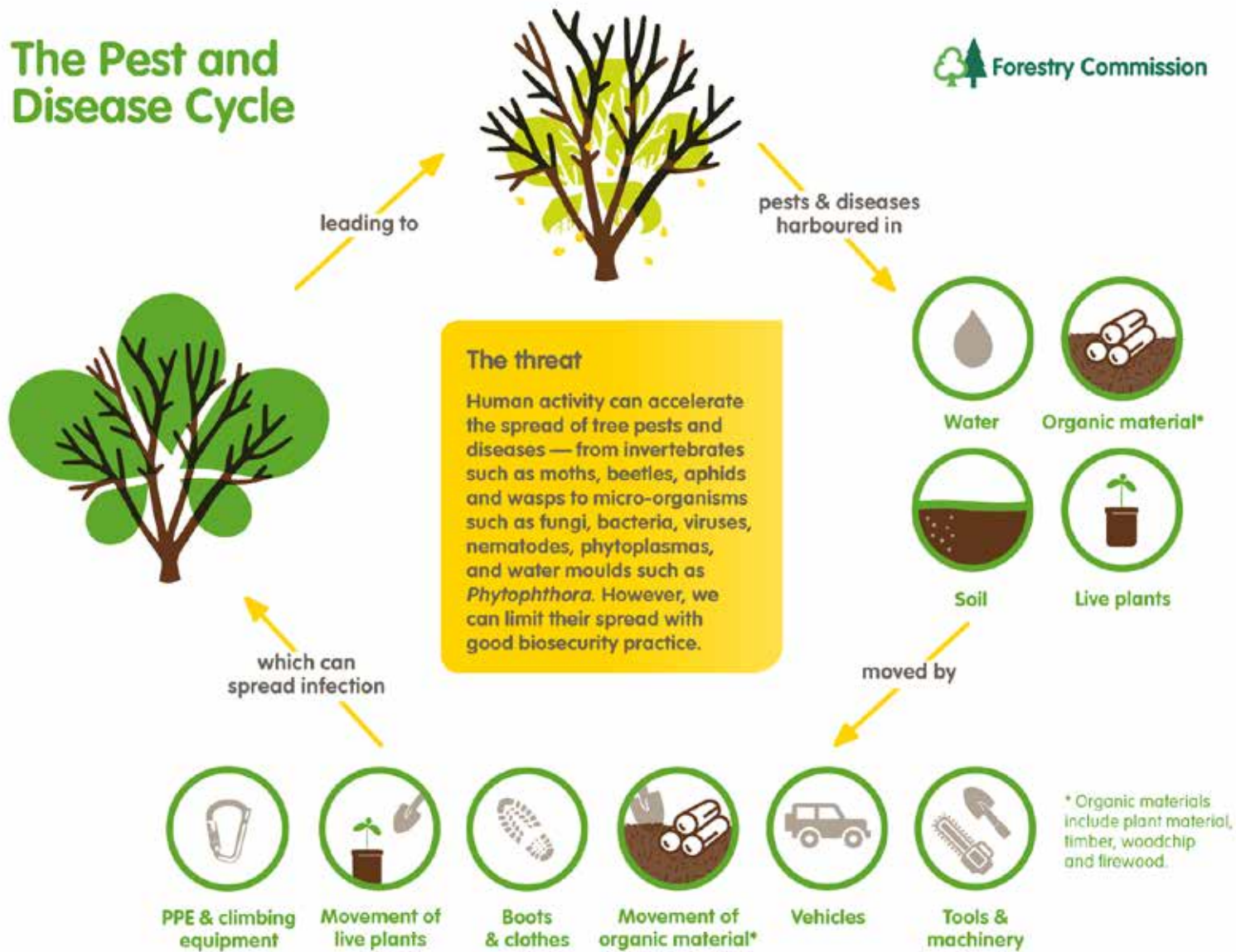
...not very big either...

5444411

# Common Materials



## The Pest and Disease Cycle





## Think kit

Remove soil and debris from boots, clothing, ropes, saws and other equipment before leaving any site. Regularly wash and dry ropes.

Clean and disinfect chainsaws and other cutting tools as part of routine maintenance.

Ensure machinery is cleaned regularly and positioned so as not to spread material around the site.



KEEP IT  
CLEAN

Don't give  
pests and  
diseases  
an easy ride



## Think transport

Remove any build-up of soil and debris on vehicles, including cabs and footwells, before leaving any site.

Use proper off-site wash-down and disinfection facilities regularly. Make a clean start each day.



KEEP IT  
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Don't give  
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## Think trees

Develop relationships with nurseries you can trust to help you source plants responsibly.

Keep records of purchases and suppliers, and monitor plants for signs of ill health.

Report suspect plants to the Forestry Commission via Tree Alert.



**KEEP IT  
CLEAN**

**Don't give**  
pests and  
diseases  
an easy ride

- **Stay up to date:** Get the latest information on pests and disease and sign up for Tree Health News here: [www.forestry.gov.uk/pestsanddiseases](http://www.forestry.gov.uk/pestsanddiseases)
- **Staff Training:** Staff and contractors can undertake the free E-Learning package. You can find the training by going to this page and following the links: [www.forestry.gov.uk/biosecurity](http://www.forestry.gov.uk/biosecurity)
- **Tell us if you spot ill health in trees:** Report it here: [www.forestry.gov.uk/treealert](http://www.forestry.gov.uk/treealert)
- **Follow us on Twitter here:** @treepestnews

**Thanks for listening**