

Healthy Plants, Healthy Places: Embedding biosecurity in landscape projects or what can you do.....?



Keith Sacre :

**Problems with imported pest and
disease:
HERE NOW.....**



**Oak
Processionay
Moth**



Chalara



**Horse Chestnut
Leaf Miner**



Massaria

On their way?



Asian long horned
beetle



Emerald Ash Borer



Ceratocystis fimbriata

And the cost: **TO LONDON**



Asian Longhorn Beetle



Acer spp
Aesculus
Albizia
Alnus
Betula
Carpinus spp
Cercidiphyllum
Corylus spp
Fagus spp
Fraxinus spp
Koelreutaria
Platanus
Populus
Prunus
Robinia
Salix spp
Sophora
Sorbus spp
Quercus palustris
Quercus rubra
Ulmus spp



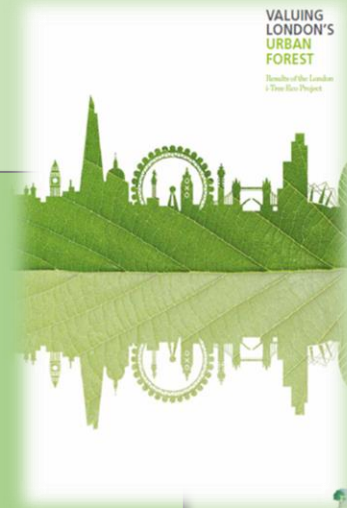
Asian Longhorn Beetle:

Could impact on some 3.8 million trees

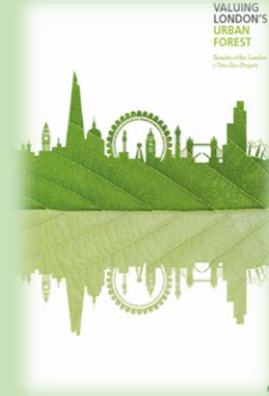
Which represents 31% of the whole population

Replacing these trees would cost

£23 billion



Ash



Emerald Ash Borer

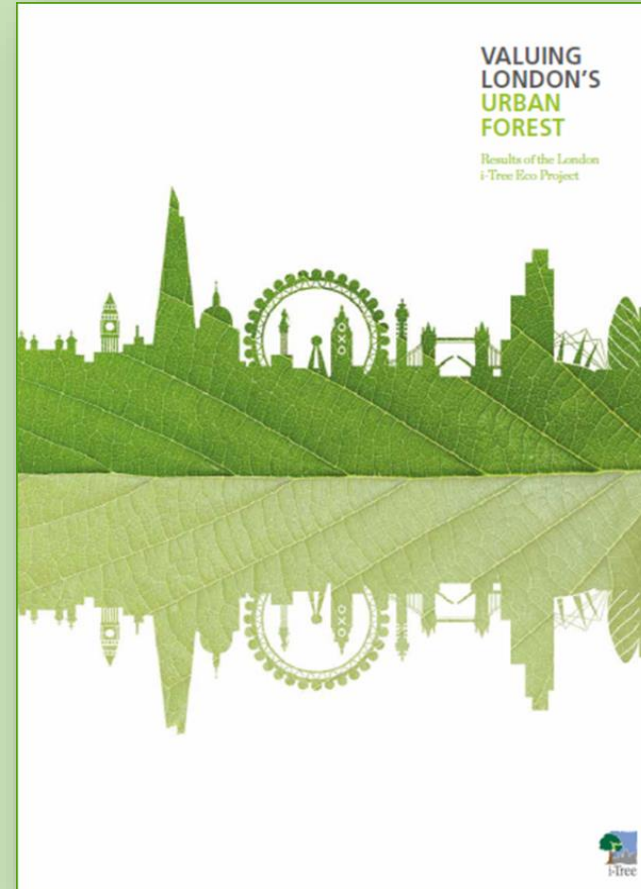
Ash



374,195 trees

59763km² leaf area

6358 mt leaf biomass



Replacement cost: £447,345,251.00

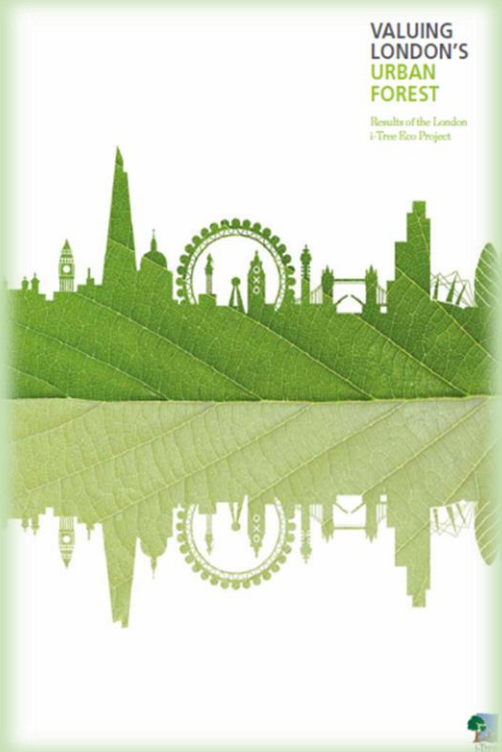


London Plane:



Plane Wilt
Ceratocystis fimbriata f platani





London Plane:

121,000 trees

40,224 km² leaf area

1756 mt leaf biomass

**8.9% of the canopy cover in inner
London**

**2.5% of the canopy cover in outer
London**



Replacement cost: £351,623,660.00

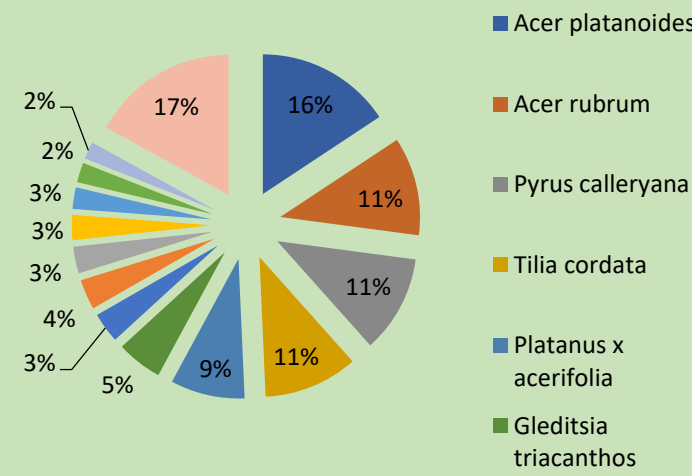
So what can you do ?



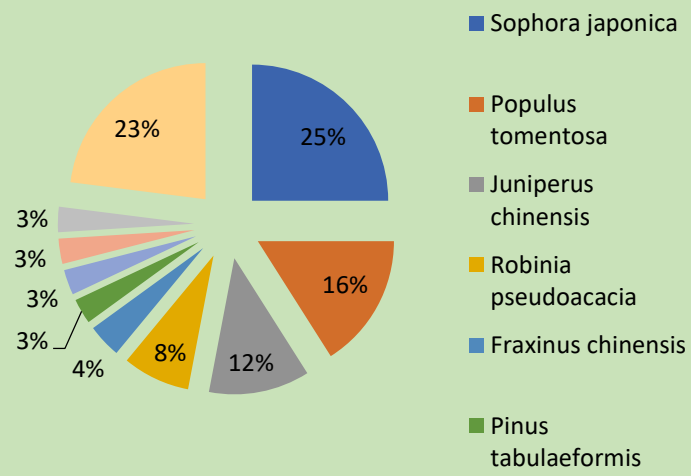
Resilience

Tree populations are more resilient to pest and disease if there is wide species diversity

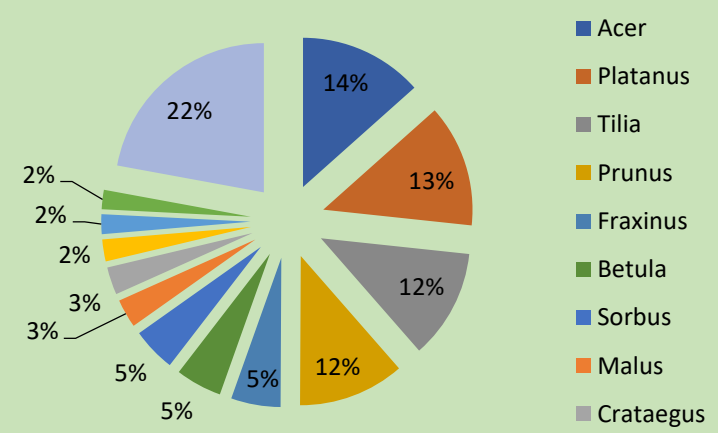
Pittsburgh, USA



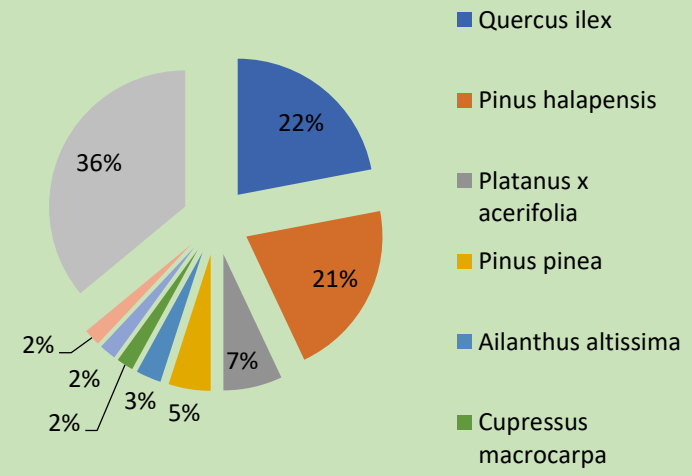
Beijing, China



Camden, London, UK



Barcelona, Spain



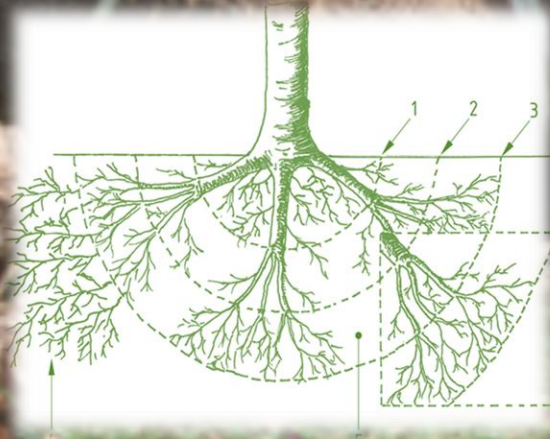
(Sjöman et al.)

THREE PRINCIPAL PRODUCTION SYSTEMS USED IN THE UK.

BARE ROOT

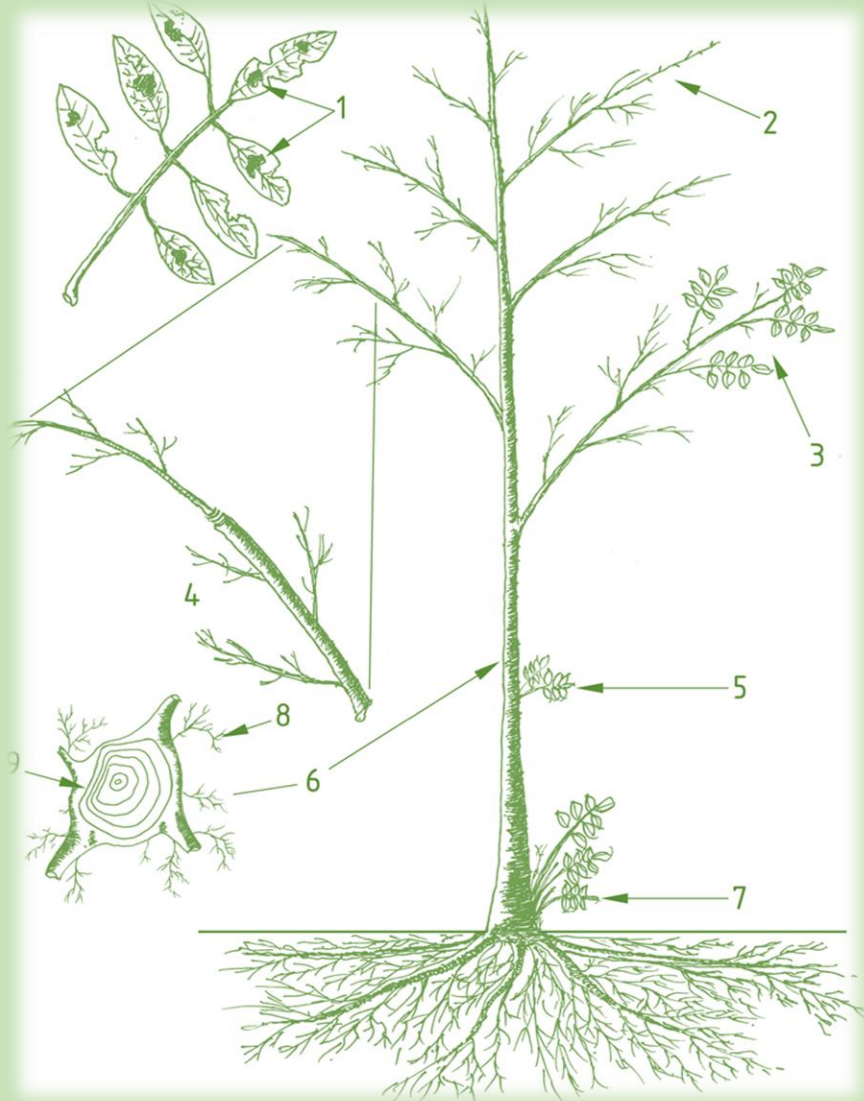
ROOTBALL
(BALL and BURLAP)

CONTAINERISED



Understand Nursery production systems and the questions to ask about, Production, tree health and biosecurity

Inspect tree health on the nursery



Assessment of poor health in young Trees : Visual signs of poor health

- 1 Leaf lesions or leaf discolouration
- 2 Dieback in crown
- 3 Low density and/or small size of foliage
- 4 Reduced length of extension growth compared to previous years' growth
- 5 Abnormal adventitious bud development on main stem
- 6 Abnormal flattening at main stem, which can indicate vascular dysfunction
- 7 Epicormic growth from rootstock
- 8 Root fibre
- 9 Abnormal flattening at main stem indicating vascular dysfunction, in cross-section

Contract grow



DEFRA

Plant Health Risk Register

There are now over 900 pests and diseases listed on the register.

Be aware of legislation and guidance

These are assessed and graded as to the severity of the threat and the likelihood of occurrence in the UK

threats to plant health is not just a matter for government;



APPLICATION OF BIOSECURITY IN ARBORICULTURE

GUIDANCE NOTE 2



Principal Authors:
Simon Cox and James Roberts

The Arboricultural Association
The Voice of Arboriculture

www.trees.org.uk

Growing together series | January 2014

Bio security with Barcham

Our policy commitment to you



Barcham
The Tree Specialists

Plant Health and Biosecurity:

THE LANDSCAPE CONSULTANT'S TOOLKIT

This guidance helps practitioners
apply biosecurity principles to their work

SGD
SOCIETY OF
GARDEN
DESIGNERS

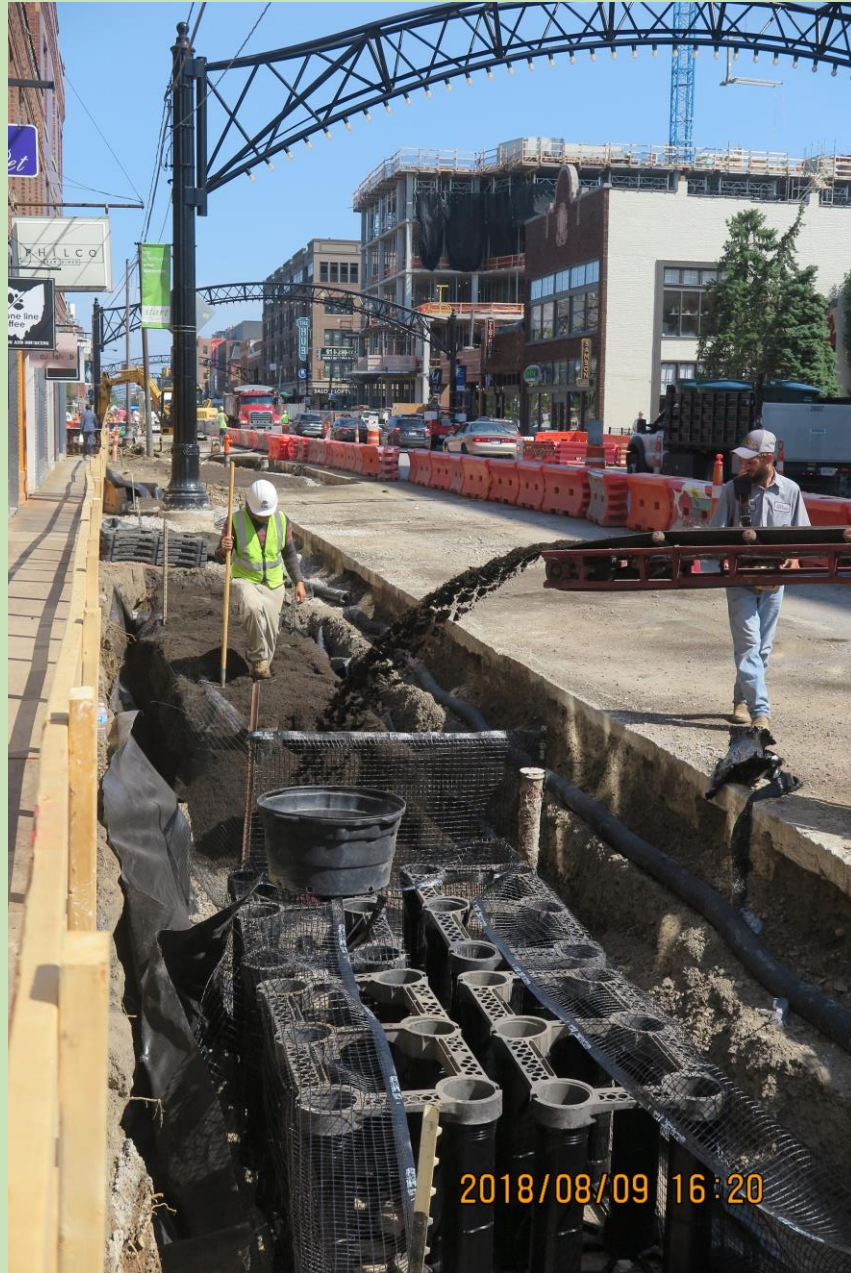
The Association of
Professional
Landscapers

BAU

British
Association
of Landscape
Industries

**Landscape
Institute**
Inspiring great places

Be aware and follow industry guidance



Monitor all aspects of, supply, installation and planting





Thanks for listening



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