



Whatever the weather

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RHS research



- Spread of pests and disease
- Soil Health
- Flooding
- Mitigation
- Urban areas: cooling, air pollution

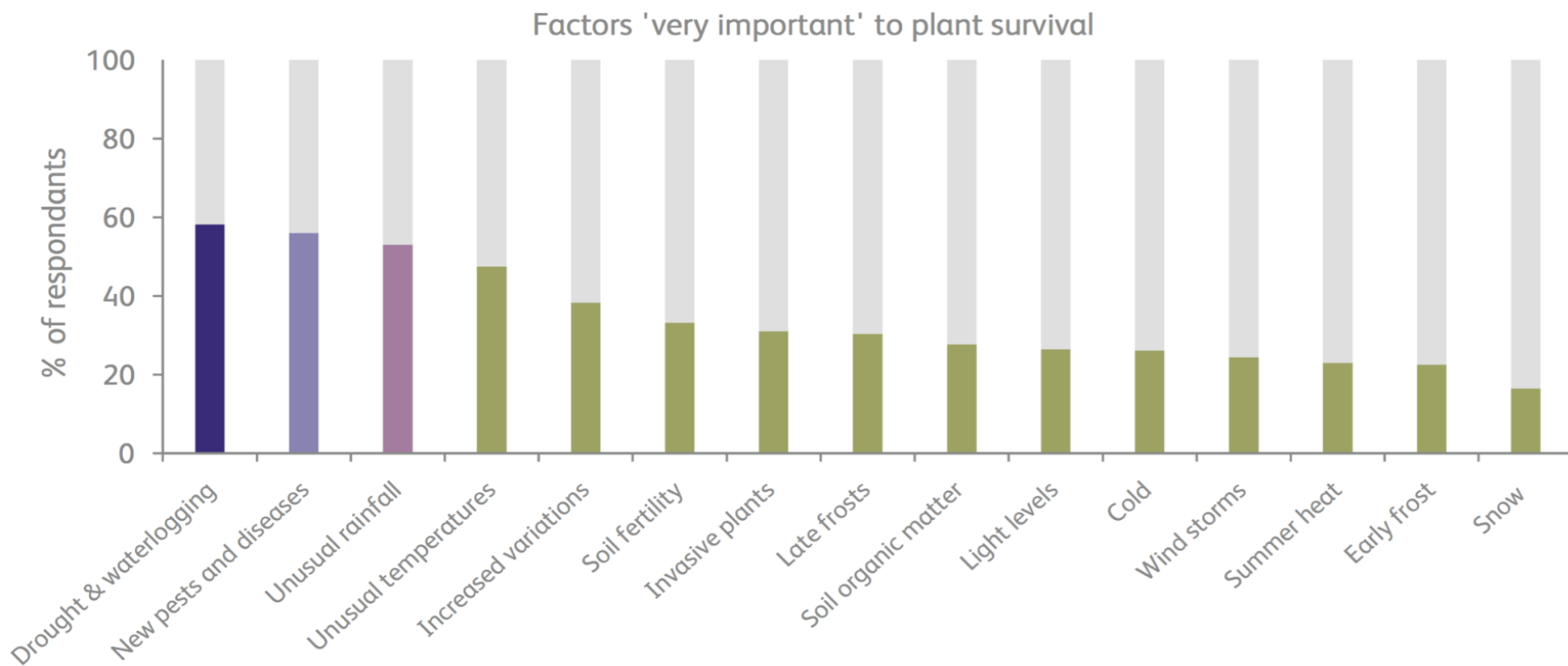
Results: Knowledge

“Only **2%** of survey respondents feel that they are prepared for gardening in a changing climate”.

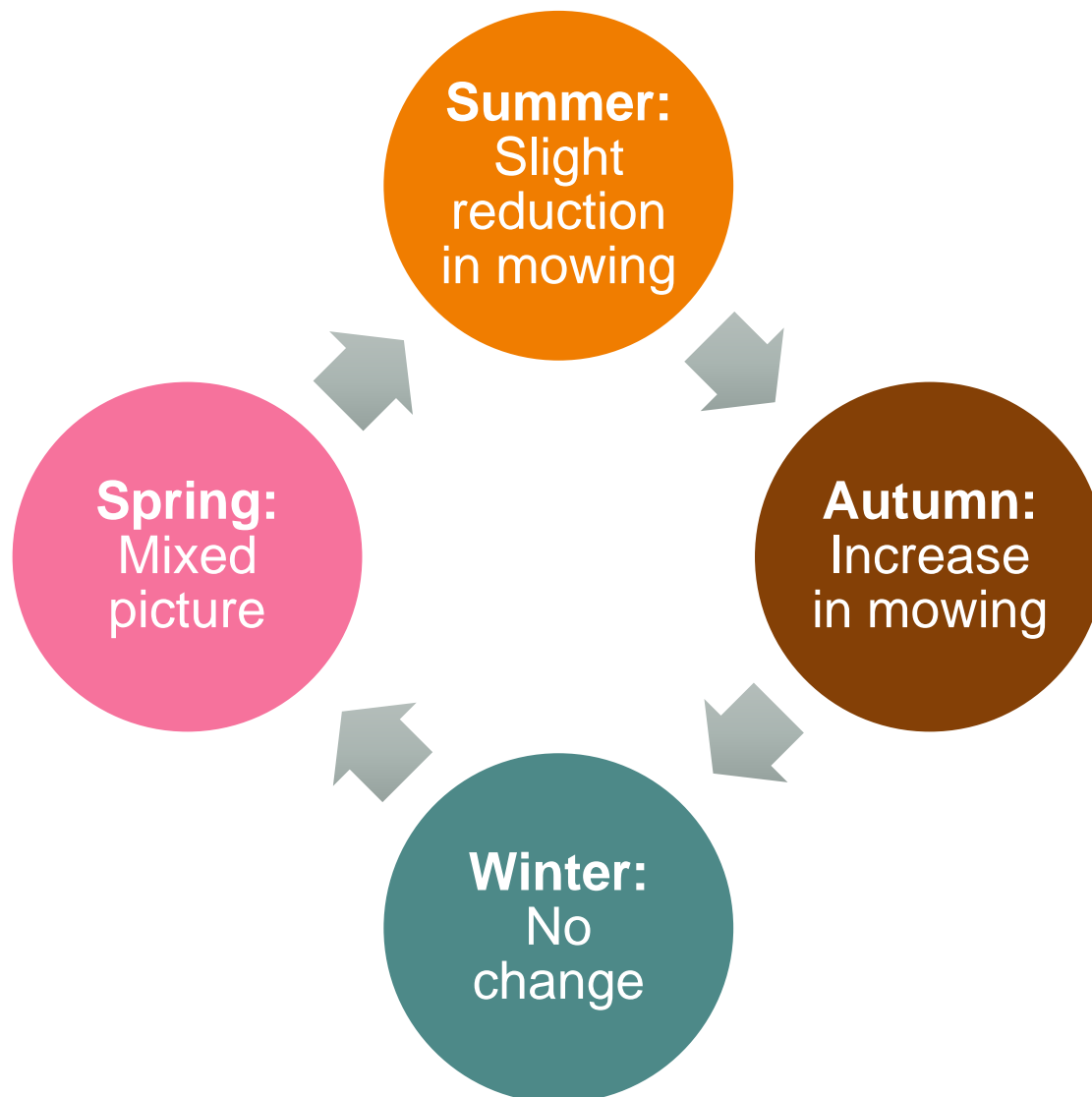
“ ...there was the idea of a warmer climate and, ten years on, we have an appreciation that changeable is a better description than warmer, and perhaps less predictable”.

Results: Concerns

- Over 50% respondents worried about drought, waterlogging and unusual rainfall



Results: Experience



Results: Willingness

- Most respondents would not want to see artificial grass replace lawns
- The majority of respondents would prefer a brown lawn in summer
- Reluctance to see a change in garden style



25%

of respondents would **cancel** their
membership to their gardening/
landscape society

Solution: communicate opportunities

- Longer growing season – already 6 weeks longer
- Grow more and new varieties
- Flexibility in gardening practices – when weather allows
- Champion native species
- More incentive for wildlife friendly gardens
- More time outside – it might be drier and warmer!





Sharing the best in Gardening

Solution: provide guidance

“The majority of survey respondents are optimistic that they will adapt”.

“The majority of respondents believe that their current understanding of climate change will only ‘moderately’ prepare them”.

Weather not climate?



81.0 mm of rain fell at Winterbourne (West Midlands)



Sharing the best in Gardening

Weather extremes in April

April 1-2: Flooding in Derbyshire

April 5: 18cm of snow in East Lothian

April 9-10: Flooding in Devon

April 19: 29.1°C in London St James's Park

April 21-22: Flooding in Southampton

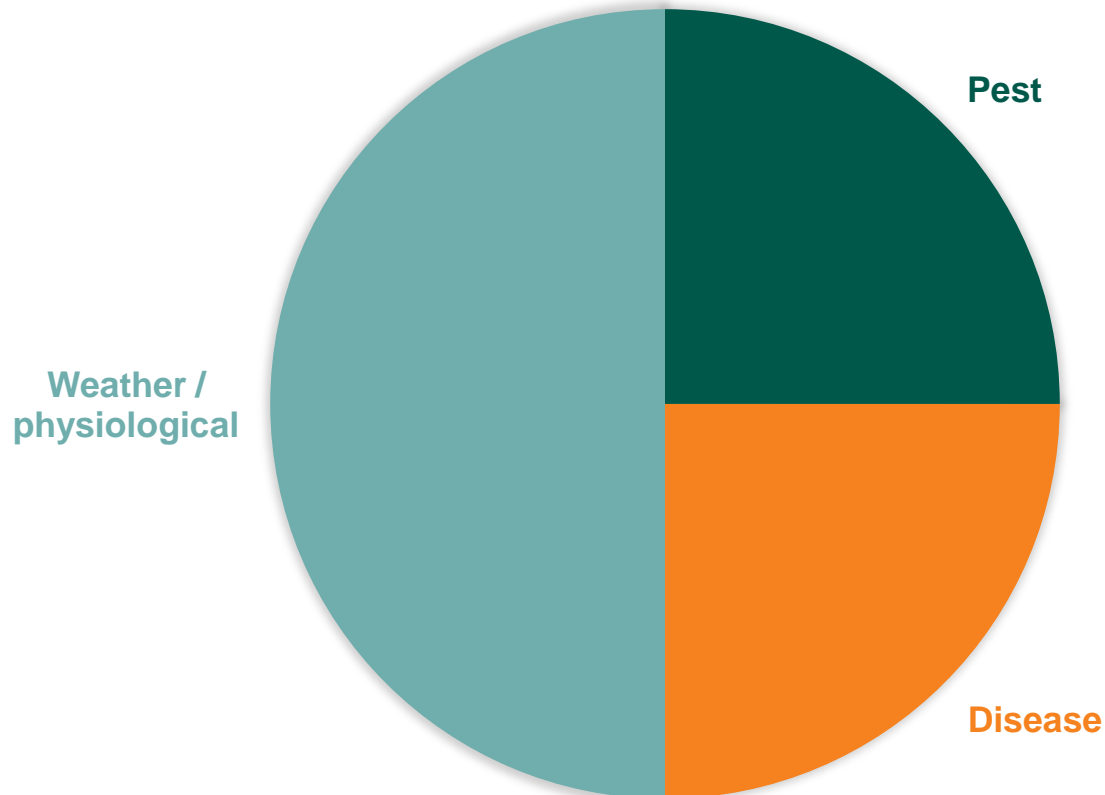
April 29: 6-7°C max in East Anglia

For gardeners... it was generally wet and cold until the second half of the month, but then exceptionally warm and dry (which is persisting)

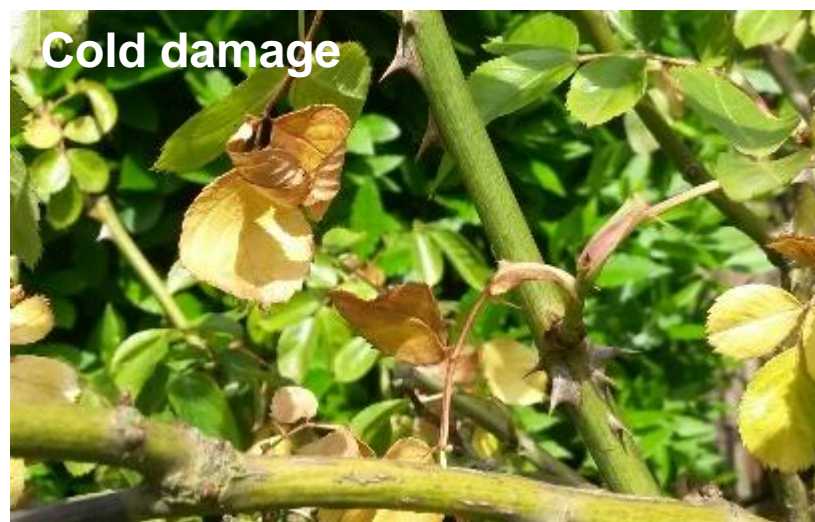
<https://www.metoffice.gov.uk/climate/uk/summaries/2018/april>

Weather in the garden

PLANT PROBLEMS



Weather problems



Weather-related disease

Powdery mildew – humid and warm



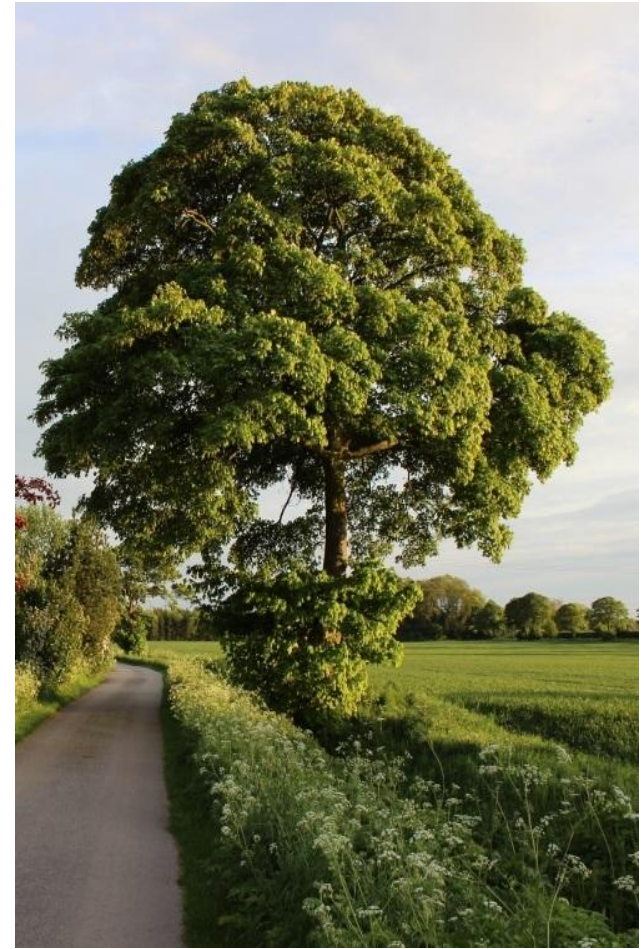
Blossom wilt – damp and warm

Adaptation: wind



Resilient tree planting

- **Rainstorms:** flooding from the coast, rivers, hard surfaces
- **Wet and dry:** areas temporarily waterlogged – resilient species e.g. *Amelanchier*
- **Wind:** filtering; street funnelling; using current shelterbelt trees e.g. sycamore, hawthorn, Corsican pine (*Pinus nigra var. maritima*)
- **Storm events** earlier in season: in leaf with sail effect increased so canopy porosity important



Probable shifts in tree choice

Challenging for:

Acer palmatum

Acer rubrum

Alnus

Betula

Populus

Sorbus

certain *Abies*, *Larix*
and *Picea* spp.

OK and more common:

Acer platanoides

Acer
pseudoplatanus
Castanea sativa

Pinus nigra

Pinus sylvestris

More frequent:

Carpinus

Cercis

Cupressus

Ginkgo

Gleditsia

Hippophae

Rhamnus

Robinia

Pinus pinea



Ginkgo biloba 'Troll'

Wet and dry



Miscanthus sinensis
'Kleine Fontaine'



Rosa rugosa
'Roseraie de L'Hay'



Stachys byzantina
(lamb's ears)

Water: too much, too little



- Mulch
- Dig in organic /no dig
- Grey water

- Rain water harvesting
- Raised beds
- Water well!

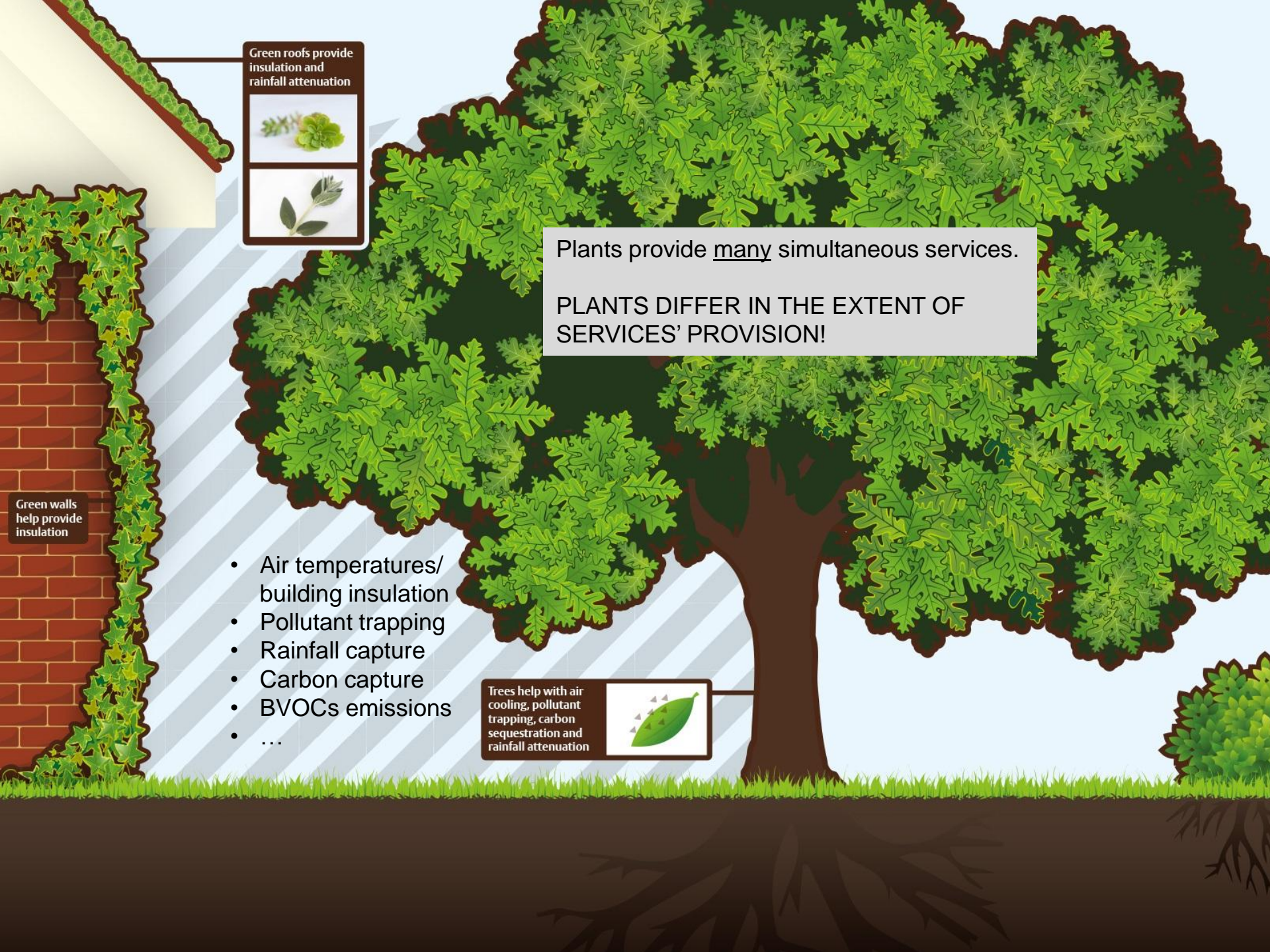


Royal
Horticultural
Society

Sharing the best in Gardening

Using your greenfingers





Green roofs provide
insulation and
rainfall attenuation



Plants provide many simultaneous services.

PLANTS DIFFER IN THE EXTENT OF
SERVICES' PROVISION!

- Air temperatures/
building insulation
- Pollutant trapping
- Rainfall capture
- Carbon capture
- BVOCs emissions
- ...

Trees help with air
cooling, pollutant
trapping, carbon
sequestration and
rainfall attenuation



Green walls
help provide
insulation

Whatever the weather

Climate sets out the challenge,
but weather is what gardeners cope with...

- **Keep growing! Keep going!**
- **Grow more!**
- **If it struggles, choose something better adapted**

