



Thinking Again; species choice for adaptation and resilience in designed historical treescapes

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Scope

Landscapes with high cultural heritage value for their aesthetic and contextual qualities where trees are a dominant element





Spirit of Place 'Genius Loci'

ge•ni•us lo•ci

('gɛn ɪ,ʊs 'loʊ ki; *Eng.* 'dʒi ni əs 'loʊ saɪ, -kaɪ)

n. Latin.

1. guardian of a place.
2. the distinctive atmosphere of a place.



Designed Treescapes: some examples...

Designed gardens and parks, usually associated with one household or dwelling such as Stowe or Petworth, palaces, country houses, manor houses,

Designed landscapes belonging to, or associated with, institutions. These may be universities and colleges, botanical gardens, cemeteries, factories, hospitals, hotels, museums, pumping stations, power generation, reservoirs

Communal or public sites associated with more than one household or dwelling such as communal gardens, squares, housing development.

Landscapes designed or used for public amenity and recreation such as public parks, public gardens, public walks, public resorts, country parks.



Exeter University





Forces for change

Climatic

Pests and disease

Diversification

Restoration

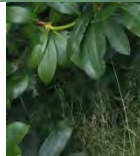
Conservation and biodiversity

Changing expectations

New opportunities



P&D





Mapping Pests and Diseases in Historic Parks and Gardens

Julia Branson, Duncan D Hornby, Andrew Campbell Sutton
and Gemma Gubbins (GeoData, University of Southampton)

Discovery, Innovation and Science in the Historic Environment





Browser address bar: <https://www.myerscough.ac.uk/media/4052/hiron:> Species Selection for Green Infra... myerscough.ac.uk

Tree Species Selection for Green Infrastructure

Issue 1.1/2018

A Guide for Specifiers

Written by:
Dr Andrew Hiron and Dr Henrik Sjöman

Primary Project Funder

Academic Partners

Guidance Sponsors

Trees & Design Action Group

NERC SCIENCE OF THE ENVIRONMENT

Lancaster University

University Centre Myerscough

SLU

Arboricultural Association

HTA

Royal Horticultural Society

Sharing the best in Gardening

Windows taskbar: 72% battery, 12:29, 03/09/2018



Tree Species Selection for Green Infrastructure: A Guide for Specifiers

Size

Environmental tolerance

Soil conditions

Pest and disease tolerance

Future maintenance

Aesthetic qualities

Leaf phenology

Native/introduced

Cost of supply

Leaf form



Diversification vs landscape 'connection'





Bicton



intended effect of the Pleasant Ground

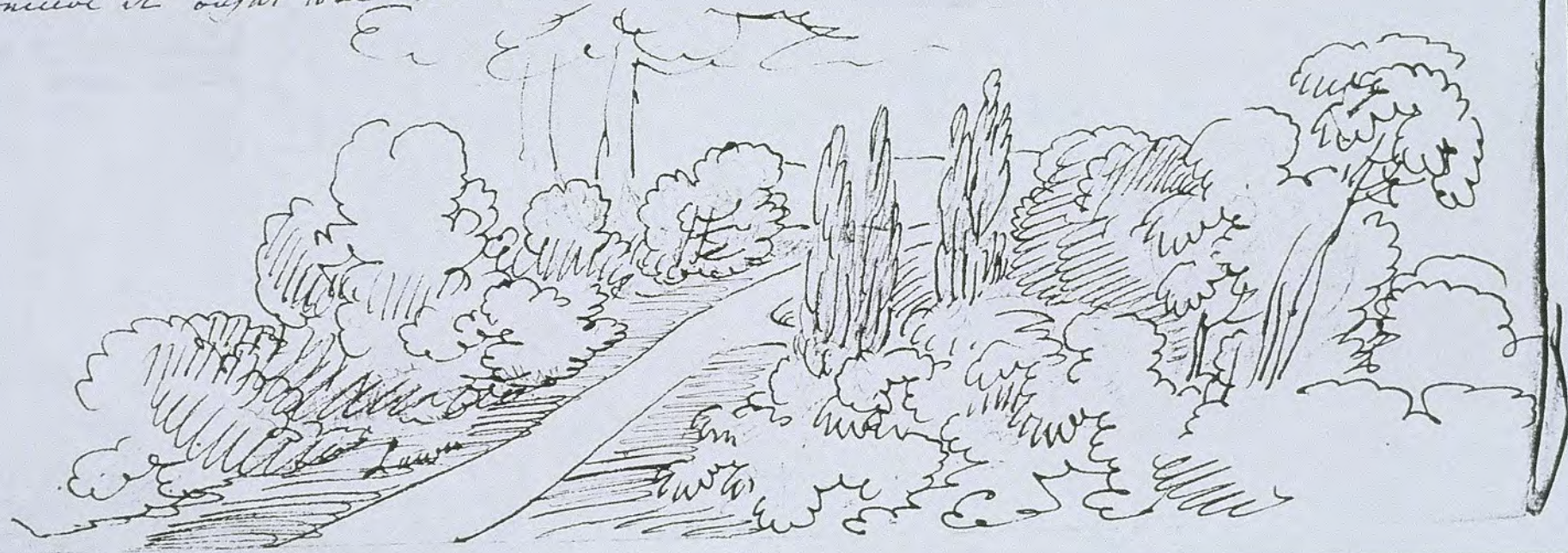


present state

no more change



conceive it ought to be







Time sequence and leading players

1675 1700 1725 1750 1775 1800 1825 1850 1875 1900

Formal French
style gardens

Late 17th century
rejection of
formality. Dutch
influence.



Early 18th century growth of the
English Landscape Garden. William
Kent, Charles Bridgeman, Lancelot
Brown, Humphrey Repton



Mid to late 18th century
Picturesque Movement.
Uvedale Price, Repton, W &
WS Gilpin



19th Century Gardenesque



Montecute





Stowe Park



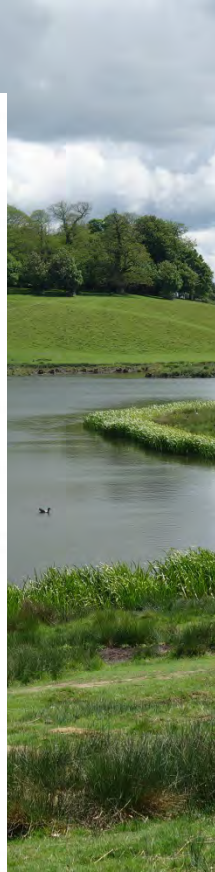
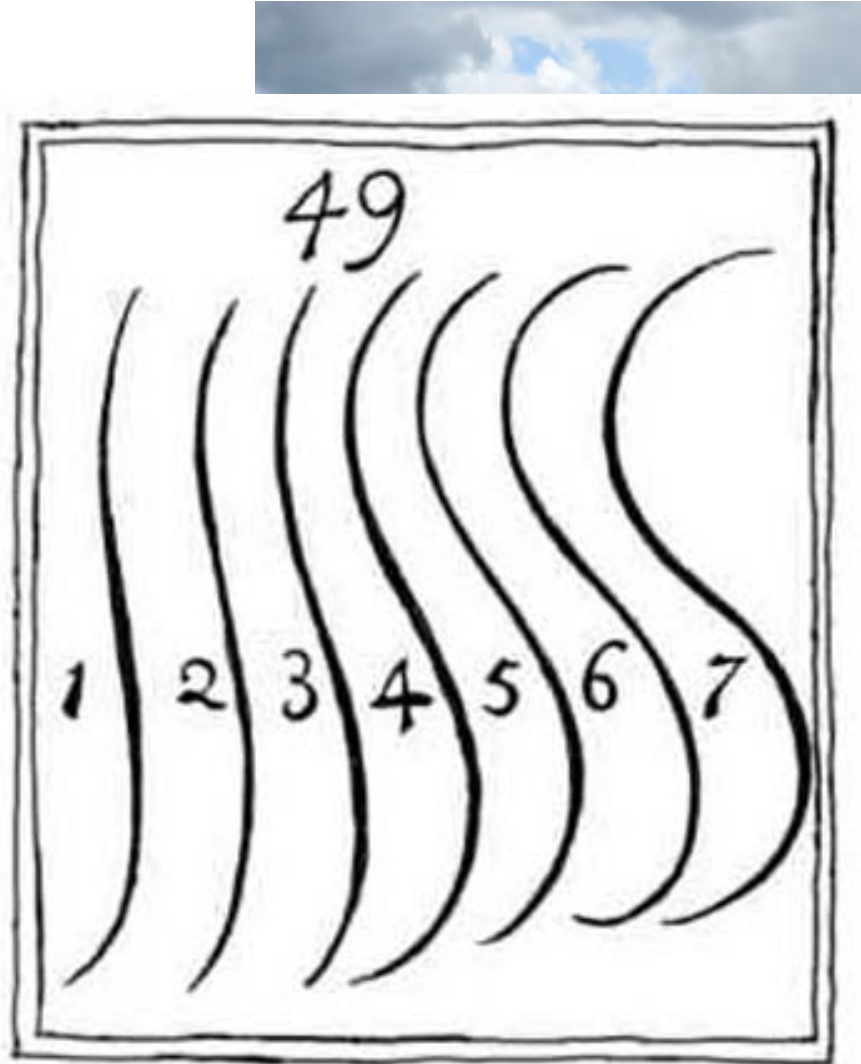


Clumber Park





Landscape Characteristics: Serpentine Style





Lessons From History

Wimpole's South
Avenue (elm
P.1720) in 1949





Research

100	plane, 8 feet	3 10 0
500	Long Elm 8 1/2 feet	15 0 0
100	Small Elm 6 ft	6 0 0
50	Chopins 12 ft	1 10 0
50	plane Long 12 ft	1 12 6
50	Lime 10 ft 2	6 0
50	White poplar 10 ft	1 10
660	Long Elm 12 ft	20 0 0
250	Small Elm 10 ft	5 4
100	after Long 12 ft	3 00 0
50	Chopins 12 ft	1 10
50	Indiantan 12 ft	2 0
50	White poplar 10 ft	1 5
50	after 10 ft	1 5
100	Lime 10 ft 2	3 0
500	Long Elm 12 ft	19 6 9
200	Small Elm 10 ft	3 6 9



West Avenue 18th Century survivors






← → <https://www.telegraph.co.uk/gar> The National Trust's top six ... x

The Telegraph


HOME » GARDENING » GARDENING PICTURE GALLERIES

The National Trust's top six tree avenues



Telegraphgardenshop

← Previous Image 5 of 6



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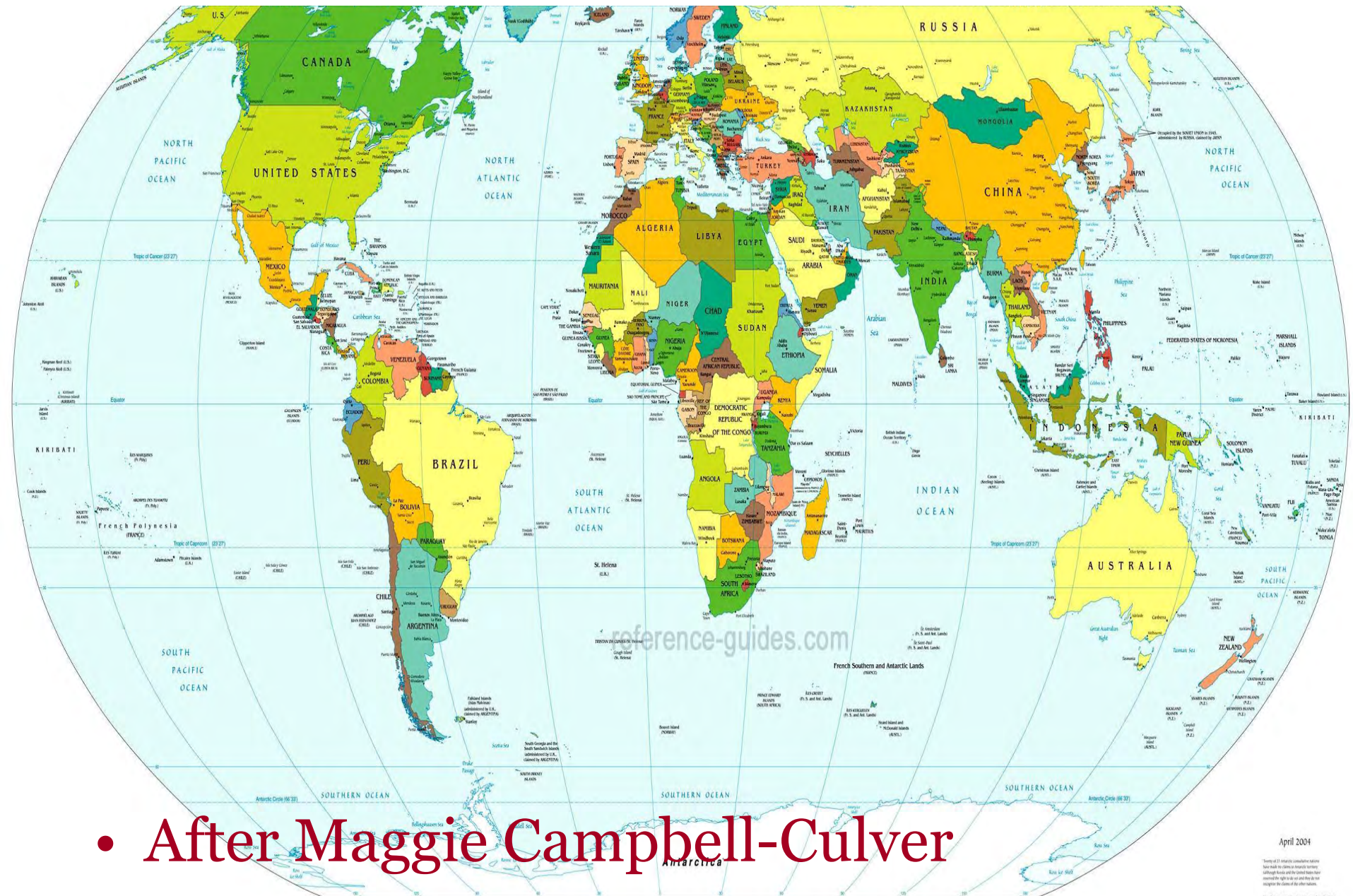
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Limes from the PCC



Plant Introduction Timeline



1000 – 1560
Normans, Crusades
& monastic influence

reference-guides.com



c.1620 – 1662
John Tradescant the Younger

c.1620 to 1662
John Tradescant the Elder

c.1620 – 1662
John Tradescant the Elder

reference-guides.com

1660 - 1720
USA Eastern seaboard





1680 - 1774
Southern Africa &
the Cape of Good Hope

1730 – 1760
First plants from China



reference-guides.com



1820 - 1860
California &
the west coast





1840 - 1870
South America

Antarctica

1840 - 1890
India and the
Himalayas



1890 - 1930
China and
Japan





Antarctica



Replacement types

Literal (like-for-like replacement)

Imitative (close match in appearance)

Functional (similar landscape contribution)

Contextual (historical or other match)

‘Spiritual’ (the spirit of place)

Inspirational (something new and imaginative)



Like-for-Like at Croome





Imitative box replacement at Greys Court





Meet The Nobles...





Elm conservation





Prumnopitys andina hedge – RBGE nursery



Prumnopitys andina - Chile



Multiple Objectives





Groups of Association

Cedrus libani (Croome Park)

	<i>Cedrus atlantica</i>	<i>Cryptomeria japonica</i>	<i>Pinus peuce</i>	<i>Pinus nigra</i> ssp. <i>Pallasiana</i>
Imitative	✓ ✓ ✓	✓	✓	✓ ✓
Functional	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Spirit of Place	✓ ✓	✓	✓ ✓	✓ ✓
Contextual	✓	✓	✓	✓ ✓ ✓



Groups of Association

Fraxinus excelsior (Ilam Park)

	<i>Carya ovata</i>	<i>Fraxinus mandshurica</i>	<i>Acer campestre</i>	<i>Toona sinensis</i>
Imitative	✓✓	✓✓	✓	✓
Functional	✓✓✓	✓✓✓	✓✓	✓✓
Spirit of place			✓✓	
Contextual			✓✓✓	



Groups of Association

Aesculus hippocastanum (Basildon Park)

	<i>Aesculus indica</i>	<i>Castanea sativa</i>	<i>Platanus orientalis</i>	<i>Acer macrophyllum</i>
Imitative	✓✓✓	✓	✓	✓✓
Functional	✓✓✓	✓✓	✓✓	✓✓
Spirit of place	✓	✓✓✓	✓	✓
Contextual		✓✓✓	✓✓	



Thank You

