THE RIGHT TREE IN THE RIGHT PLACE

Darren Reidy

Ecologist

Sustainability Officer, UCC

OVERVIEW

- Trees in the Irish Landscape

- Understanding the Environment & Context

- Considerations for Community Based Projects

INTRODUCTION

- Ireland once almost entirely covered (80%) in woodland.

- Landscape steeped in the cultural significance of trees.
  - Brehon Law
  - Myths & Folklore
  - Placenames

- Consistent decline over the last 6000yrs
  - Early agriculture,
  - Dutch Elm Disease & Bogs
  - Smelting Iron (1600s)
  - Expansion of the British Empire (1800s)
  - Only 1% remained at the turn of the 20th Century
  - State Afforestation & Commercial Forestry (11%)
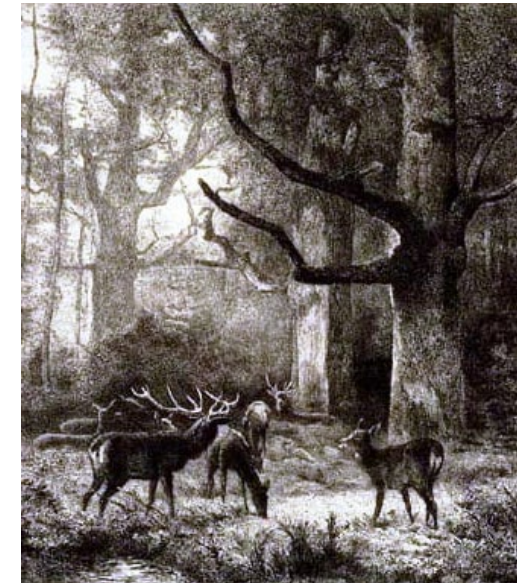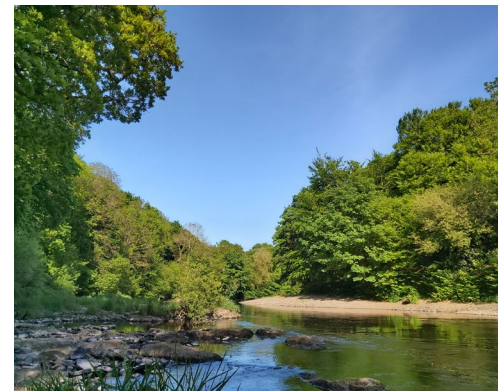
DIVERSITY OF NATIVE TREES

Broadleaf – Oak, Ash, Alder, Birch, Hazel, Rowan, Holly etc.

Coniferous – Yew, Scots Pine, Juniper

Shrubs & Scrub – Willow (Sally), Hawthorn, Blackthorn, Elder, Spindle, Guelder Rose etc.

THE MARDYKE, CORK.

INTRODUCED TREES

Streetscapes & Demesnes – Beech, Horse Chestnut, Sweet Chestnut, Lime, London Plane

Parks & Gardens – Sycamore, Maples, Laurel, Rhododendrons, Countless Exotic Varieties

Commercial Forestry – Sitka Spruce, Larch, Lodgepole Pine, Douglas Fir

SEEING THE WOOD FOR THE TREES

- Not all trees are equal

- Species assemblages

- Ecosystem functioning

- 21 different 'woodland' types in Ireland
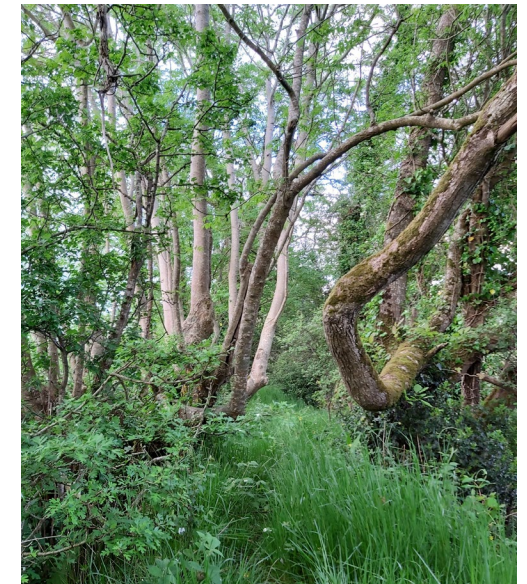
How do I choose a tree?

WHAT IS THE OBJECTIVE?

- Aesthetic/Functionality

- Public Amenity

- Biodiversity & Ecosystem services

- Climate change

- All of the above?

CHOOSING TREES FOR SPECIFIC PURPOSE

- Screening & Privacy – Holly & Yew (Evergreen)

- Stock-proofing – Hawthorn, Blackthorn

- Revegetating eroding soils – Willow, Alder,

- Pollinators – Hawthorn, Blackthorn, Rowan

- Foraging – Elder, Hazel, Crab Apple

- Carbon sequestration – Oak

- 'Rewilding'

LOOK AT THE CONTEXT

Environment & Landscape

- Soil Type, Geology, Water Level

- Which species already thrive locally?

- Build Environment & Cultural Context

- Local Knowledge!

Socioeconomic Needs

- Enhance public realm

- Meeting the needs of society

- Social or antisocial planting

SOME TOOLS

- Trees for various soil types

https://www.treecouncil.ie/the-right-tree-in-the-right-place

- National Biodiversity Data Centre

https://maps.biodiversityireland.ie/

- Heritage Maps

https://www.heritagemaps.ie/WebApps/HeritageMaps/index.html

- Ordnance Survey Ireland

http://map.geohive.ie/

- Aerial imagery

https://www.bing.com/maps

- All Ireland Pollinator Plan
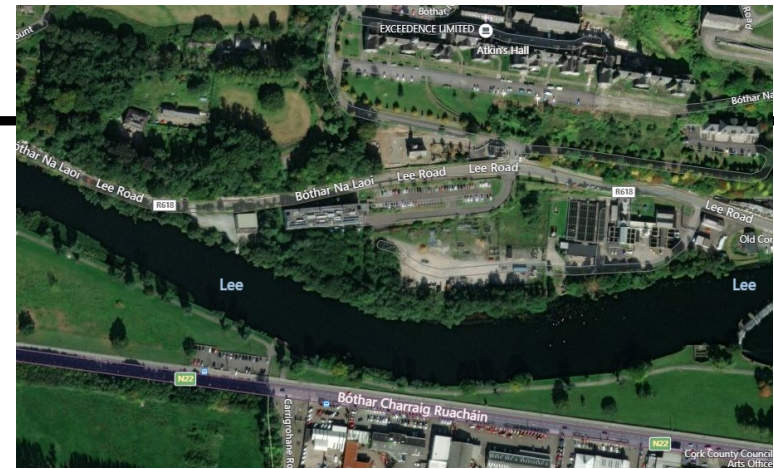
https://pollinators.ie/
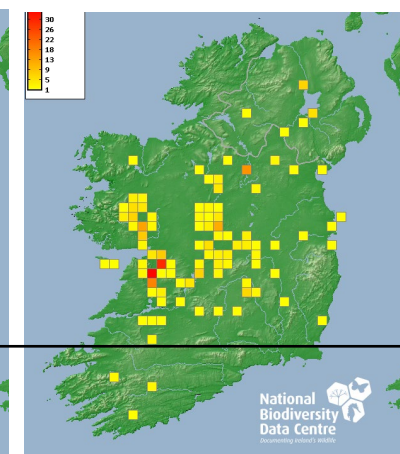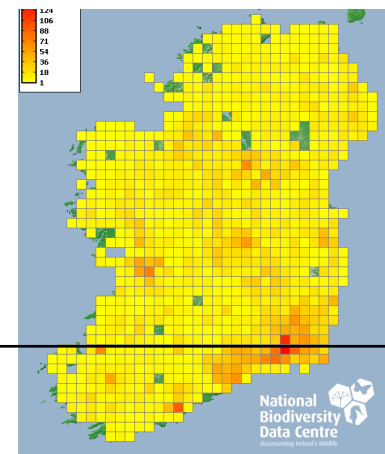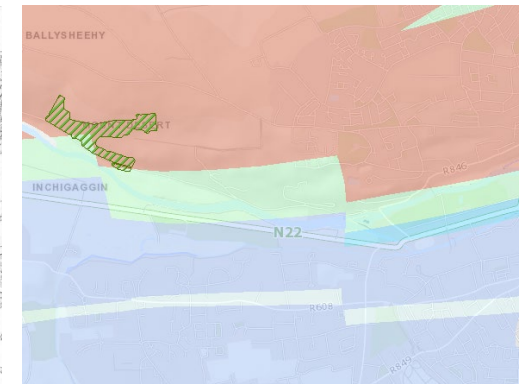
SOME CONSIDERATIONS FOR LARGER COMMUNITY PLANTING INITIATIVES

- Biodiversity Enhancement & Conservation

- Climate Mitigation

PROTECT WHAT YOU ALREADY HAVE

- Hedgerows & scrub are immensely valuable & not easily replaced.

- Rewilding & Ecological Succession

- Non-native trees have value if they are not dominant & integrated with the landscape

- Identify & manage threats.
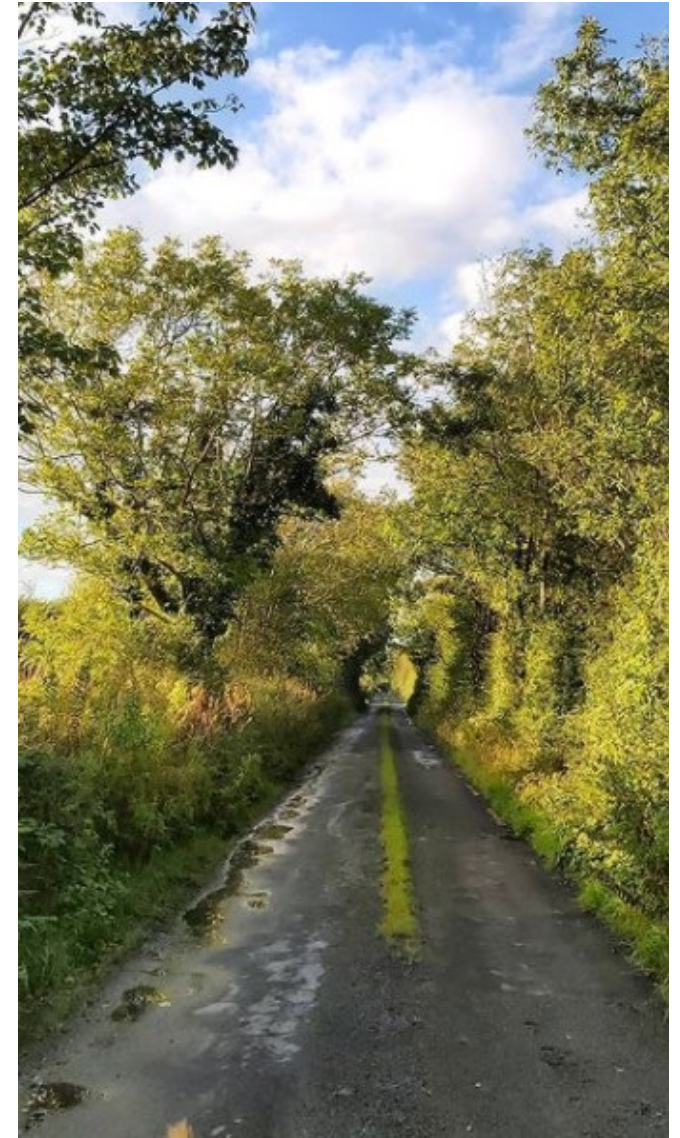
AVOID PLANTING ECOLOGICALLY VALUABLE SITES

- Don't drain wetlands or plant on peat

- Negative impacts on biodiversity & carbon release

- Consider wetland restoration instead.

- Some locations have legal designations.

- Archaeologically Sensitive Sites

- Gardens, Improved grasslands, eroding soils & brownfield sites benefit the most.

DEAD WOOD IS GOOD!

WHAT IF I PLANT THE WRONG TREE?

- It is not very likely that you will as long as you think about intent & context.

- Choosing the right tree is about best outcome for people & planet.

- Largest conflicts in urban spaces are around available space and land use, not tree type.

- Our most common native trees are widely distributed - Source locally if possible.

- If a tree is unhappy it just wont thrive.

- Large scale planting? Ask for help.

LOOK A LITTLE CLOSER…

…at the variety of life that a single tree can support.

Dr Darren Reidy | dreidy@ucc.ie |

THANK YOU