

Agroforestry Pollinator Plantations 4 the Future

APP4Future is a free to use interactive map to predict how future climate scenarios may impact tree species suitability for long-term survival on specific planting sites in England. Forest Research scientists have put together an Ecological Site Classification (ESC) climate prediction tool which assesses how site and soil may be impacted by predicted climate future extremes, such as rainfall, drought, wind-speeds, and temperatures. APP4Future also provides in-depth information on tree species beneficial for pollinators and suitable for growing in the British Isles.

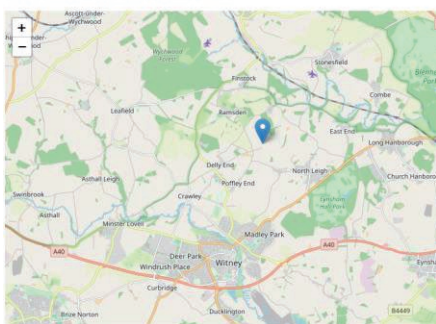


Firstly plot your intended tree-planting site on the interactive map. Then choose one of four future climate scenarios based on the Intergovernmental Panel on Climate Change (IPCC) greenhouse gas concentration trajectory. The pathways describe different climate futures, all of which are considered possible depending on the volume of greenhouse gases emitted in the years to come.

Search For Suitable Species for Your Location

Step 1

Begin with the map search for your intended site, field or plot for planting...
Scroll to zoom in or out and click to select location.



Step 2

Choose a Future Climate Scenario and Temperature Change Projection which ranges from best-case, case scenario, depending on your level of optimism:

Representative Concentration Pathway (RCP) is a greenhouse gas concentration (not emissions) to Panel on Climate Change (IPCC). The pathways describe different climate futures, all of which are cost greenhouse gases emitted in the years to come:

From Forest Research's tool ESC you will see all of the tree species displayed with a traffic lights key showing suitability variables for that site, and how compatible this site is with each tree species.

Torminalis glaberrima Wild service tree

Optimum Conditions for Growth: (Synonym Sorbus torminalis) A med often on alkaline, but also found on neutral or acid soil. Prefers an open only reaches as far north as Cumbria and Yorkshire.



[Show All Attributes and Uses in Agroforestry](#)

Quercus petraea Sessile oak

Optimum Conditions for Growth: A large, long lived canopy tree. Pref rainfall as found in upland areas, especially in the west.



[Show All Attributes and Uses in Agroforestry](#)

Alnus cordata Italian alder

Optimum Conditions for Growth: Will grow on most soils, including, p on acid or alkaline soil pH.



[Show All Attributes and Uses in Agroforestry](#)

Prunus domestica Common plum

Optimum Conditions for Growth: Small to medium sized tree, suit though no strong dependence on soil pH.



[Show All Attributes and Uses in Agroforestry](#)

Finally all the attributes and uses in agroforestry will be displayed for each species. This information provides key facts for possible farming diversification and benefits to pollinators.

[Show All Attributes and Uses in Agroforestry](#)



Optimum Conditions for Growth: Small to medium sized tree, suitable though no strong dependence on soil pH.



Species Tolerances

- Drought Tolerance: Medium

Service to Pollinators

- Summary of Service to Pollinators: Very good for the build up of bumble bee and honeybee colonies in spring. Total flowering time can be extended by choosing several different varieties. Honeydew also produced when aphids active. Extra-floral nectaries producing yet more nectar,
- Nectar Value to Pollinators: 3 (of 0-3)
- Honeydew Value to Pollinators: 1 (of 0-3)
- Pollen Value to Bees: 3 (of 0-3)
- Flowering Period: March-Apr

APP4Future was funded by Defra through their Farming Innovation Programme and delivered in partnership with Innovate UK. A collaboration between Bee Happy Plants & Seeds, Forest Research and the Soil Association, this project's aim is to provide knowledge for the public good.

