The Botanical Heatmaps and the Summarised Botanical Value Map

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NCEA Natural Capital and Ecosystem Assessment

Right Tree, Right Place

- The UK Government's ambition to increase tree and woodland cover in England from 14 to 17%, by more than trebling annual planting rates by 2050, representing a major shift in land use policy.
- Poorly targeted tree planting and woodland establishment can damage existing wildlife and carbon-rich habitats.
- More evidence is needed to support these types of decision making and spatially planning, to ensure important plant communities are preserved.

Working in partnership with the Botanical Society for Britain and Ireland (BSBI)

Under the Natural Capital and Ecosystem Assessment (NCEA) programme, Natural England have been working alongside the Botanical Society for Britain and Ireland (BSBI) to mobilise their database of vascular plant records collected by their vast network of expert recorders and develop new mapping products. The Woodland Trust helpfully funded early development of this approach and, alongside Forestry Commission, has provided advice and support.

The maps combine BSBI's plant occurrence records captured from 1970 -2021 and summarise data on:

- Rare, Scarce and Threatened (RST) plant species at the hectare scale (100 m resolution).
- Priority Habitat Positive Indicators (PHPI) species at monad scale (1km resolution):, which are representative species of high quality semi-natural habitats. These combine lists of BSBI axiophyte species, positive habitat indicators from Common Standards Monitoring and Ancient Woodland Indicators.

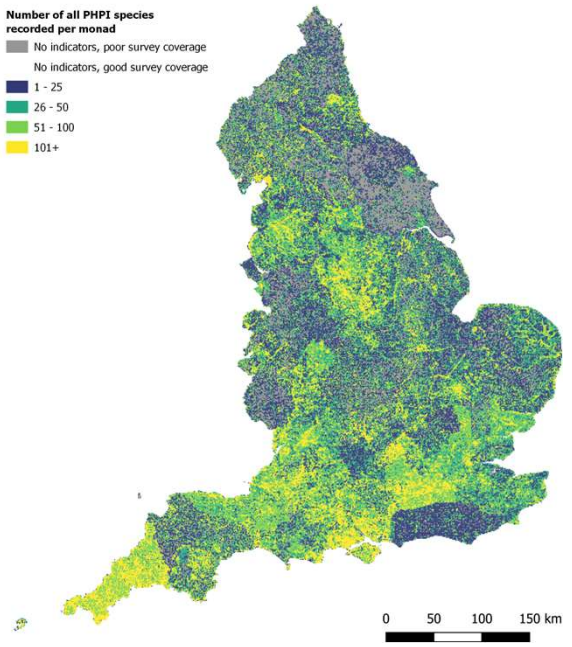
THE BOTANICAL HEATMAPS

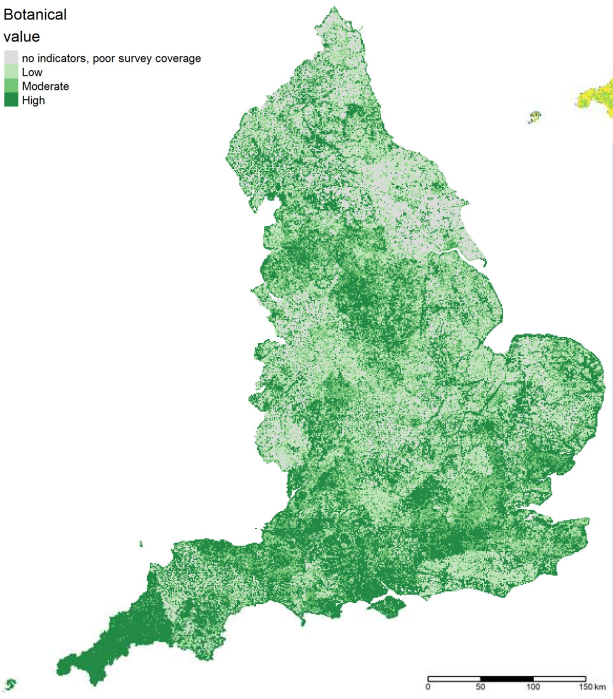
We have created a series of botanical heatmaps which summarise occurrence, species lists and dates last recorded for:

- GB Rare, Scarce and Threatened (RST) plant species at the 100m scale.
- Priority Habitat Positive Indicator (PHPI) species at the 1km scale, with map attributions for total indicator counts as well as counts split out by associated broad habitat type using the Plantatt database.
- Ancient Woodland Indicator species at the 1km scale

What can these data tell us:

- Indications of the locations and types of habitat present at each site
- Areas of interest for species of conservation concern
- Areas which require more detailed site assessment or greater survey effort.





THE SUMMARISED BOTANICAL VALUE MAP

An easily interpretable map of 'High', 'Moderate' and 'Low' value score for each 1km grid square based on their value for vascular plant species. This is a data layer derived from the more detailed botanical heatmaps and is based on:

- the presence of plant species of conservation concern
- the presence of high quality semi-natural habitat, derived from the positive habitat priority indicators using a localised benchmarking approach.

What can it tell us?

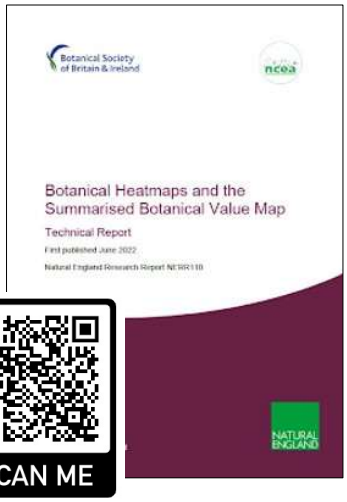
- Likely sites of high botanical value which need to be preserved in the landscape
- Although not suitable for detailed site assessment, this map is ideal for high-level spatial planning on a landscape scale.

Accessing the data

The Summarised Botanical Value map is openly available under OGL.

Botanical Heatmaps are under more restrictive licensing due to sensitivities of the conservation species data, please contact the team to discuss your potential data use case at botanicalheatmaps@naturalengland.org.uk

SCAN ME



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What are the next steps?

- Planned annual updates to the data layers to refresh with the latest BSBI records
- Further analysis to explore data captured at lower resolutions and how these maps interact with other available biological heatmaps to inform land use decision making.

Botanical Society of Britain & Ireland

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