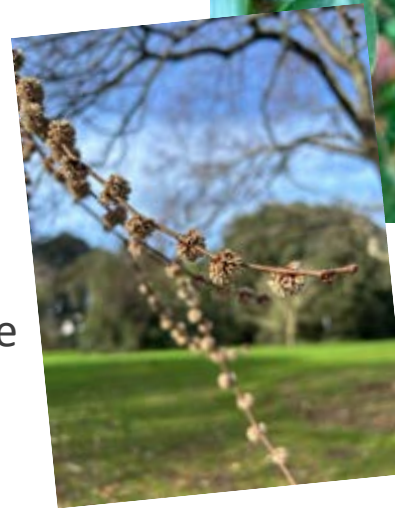Catherine Walter

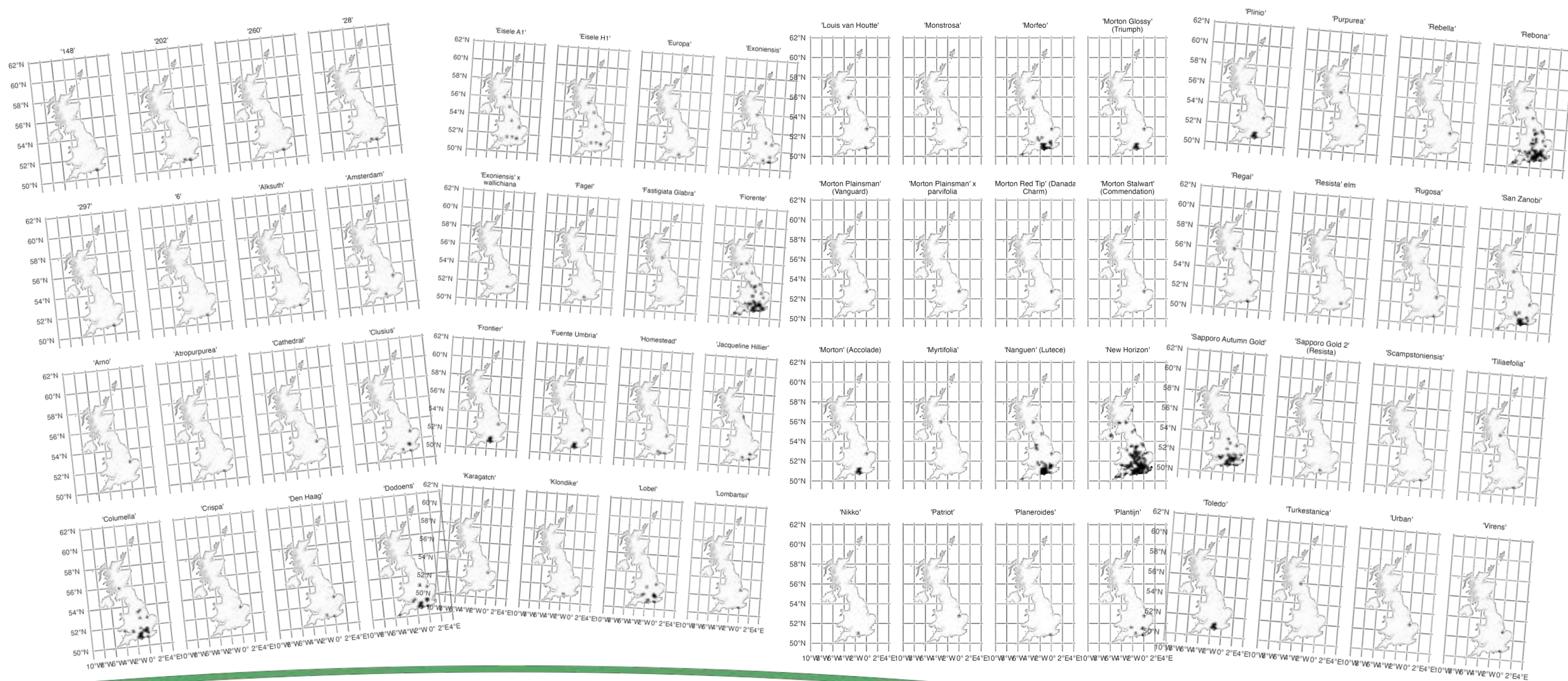# Intern Diary – Mapping the Distribution of UK Elm

My project involved gathering data on, and mapping the distribution of the different elm species, cultivars and varieties throughout the UK

Firstly, I spent time familiarizing myself on the complex taxonomy of the genus *Ulmus*, and carried out a literature search to understand the history of elm, elm cultivation and Dutch Elm Disease.
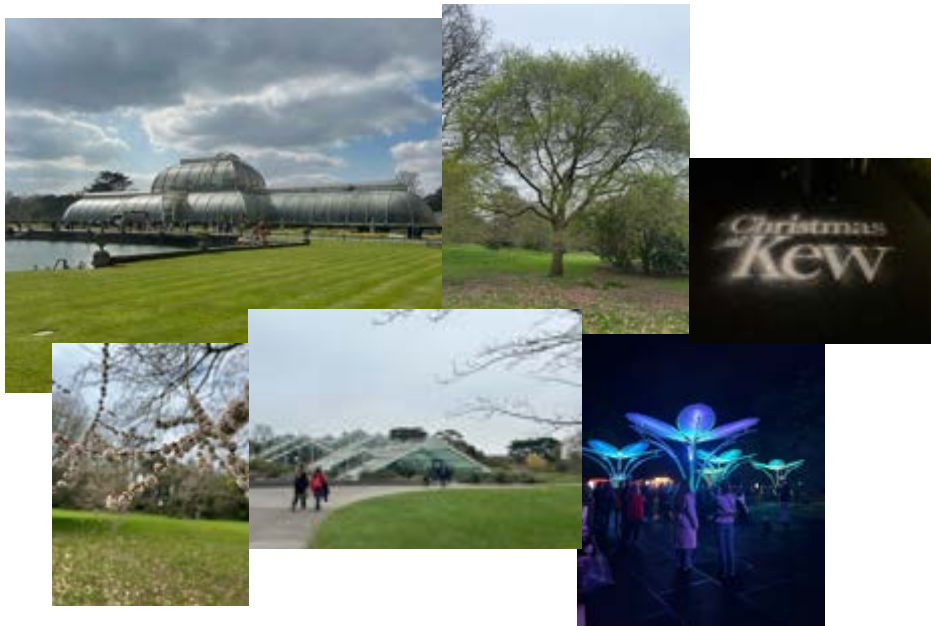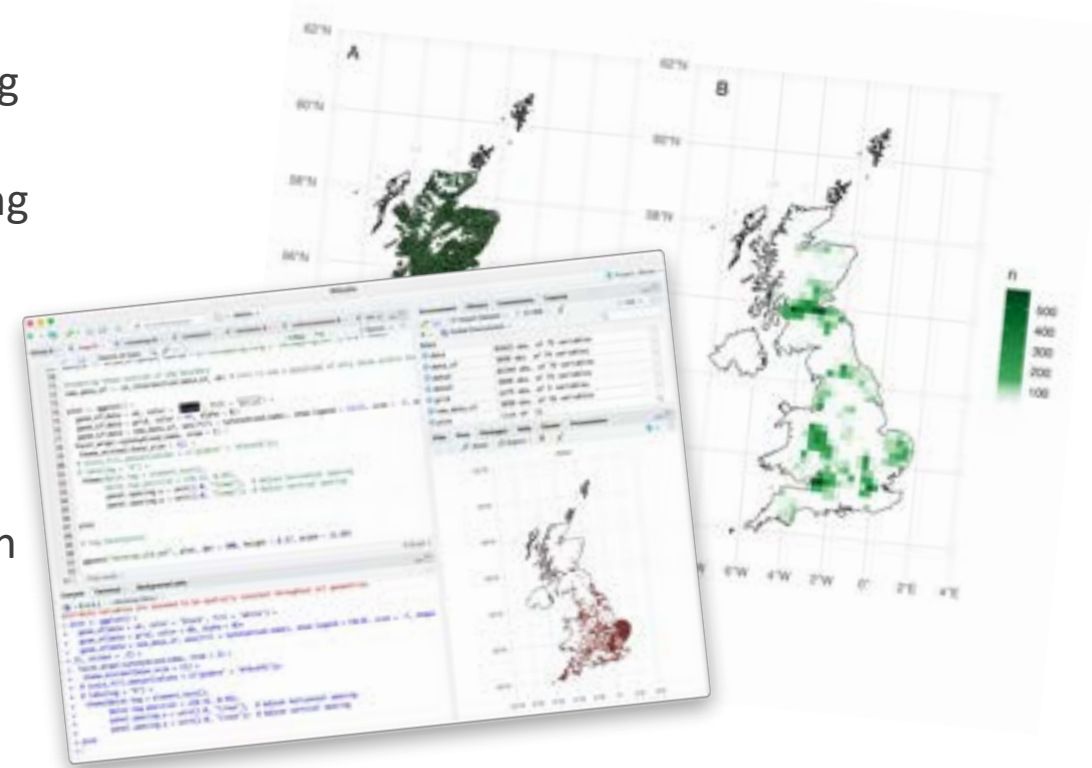
Having access to Kew's herbarium and living collections meant I could learn the distinguishing characteristics of elm trees.

Data was gathered from a variety of sources, allowing me to produce maps for 252 different elm species, cultivars and varieties, including many disease-resistant cultivars that have been planted in elm conservation projects.

What skills did I develop?

- Use of Excel and R to analyse large datasets, considerably improving my understanding of the R programming language
- Communication and interpersonal skills through regularly contacting with internal and external stakeholders
- Taking initiative, managing my project's timeline and progress, and knowing when to ask for help
- Scientific writing - by drafting a manuscript by the end of the internship
- Presented my project to a diverse audience in the CFP Elm Research Webinar

Additional experiences:

- Learnt how to build interactive applications in R Shiny
- I was also able to learn from and engage with an active community of elm researchers and enthusiasts
- Attended PhD student Fritha's workshop in Brighton to help carry out participatory mapping activities
- Visited Wakehurst and the Millenium Seed Bank on an intern day, where we were able to meet the interns based at Forest Research
- Part of a collaborative lab group, with the opportunity to share ideas, get feedback and learn about a wide range of research projects
- Regular opportunities to attend talks at Kew to learn about plant conservation research
- Access to the Royal Botanic Gardens, Kew and exhibitions
- Future career guidance and support from supervisor and colleagues
- Christmas at Kew!

Final Thoughts

- This internship has been a great opportunity to apply and build upon knowledge gained during my Master's in Biology.

- Being able to problem-solve and be more creative when programming has made me keen to use and build on my R skills.

- I have gained confidence in my own decision-making and ability to communicate with others.

- The experience has confirmed my desire to pursue a career or further study in conservation, and I am excited to be able to apply and develop my new skills.

- There are many dedicated and passionate individuals working towards protecting trees in the UK, and it has been a pleasure to be introduced to such an amazing network!