

Uni of Leicester

‘My Tree Project’

1) Name of Institution

University of Leicester

2) Name of Initiative

The MyTree Project

3) Initiative Outline

The MyTree project is part of a second year UG module available to Biological and Environmental Sciences students. It develops students’ green skills through an accessible, campus-based fieldwork intervention. It combines field identification, survey techniques, citizen/community science, and sustainability education while supporting LP7 and LP9.

4) Context/History/Need for Initiative

The MyTree project has been running as an engagement activity within the “Global Change Biology and Conservation” module since 2021, with data related to it offered as a potential Honours project for other Biological Sciences students. This dual use enables the development of a long-term ecological data set, alongside the opportunity for student co-development of the project. MyTree was initially created to provide field skills development at a time when university field trips were not permitted due to Covid. The benefit of this approach without the barriers presented by residential field trips quickly became evident and MyTree has remained embedded within the module ever since.

5) What happens and how it is assessed

Students are each assigned a campus tree for the duration of the autumn term. Each week, students visit “their” tree to photograph it and analyse canopy colour change using digital software as a measure of autumn senescence. This data contributes to a long-term study examining climate change impacts on urban trees. In addition, each week students make observations, or take tree measurements, which relate to the weekly taught content of the module. For instance, during the week that carbon-offsetting is introduced, students are prompted to calculate the carbon storage of their tree and reflect on its equivalence in terms of travel-generated emissions. Students obtain a weekly engagement mark for each submission, which counts towards their overall module grade.

Week	Example Topic	Example MyTree Task (In addition to % colour calculations)
Week 1	Introduction to citizen science and phenology	Find your tree using a What3Words code.
Week 2	Biodiversity	Identify your tree species
Week 3	Ecosystem functioning Ecosystem services	Use the Treezilla App to calculate the ecosystem service of "water intercepted" by your tree.

Week 4	Climate change	Calculate the carbon stored in your tree.
Week 5	Invasive species Over-exploitation of resources	Research whether your tree is native or introduced.
Week 6	Light-week (no teaching)	Reflect on your experience of the MyTree project and explore concepts of nature-connectedness.
Week 7	Pollution Habitat fragmentation	Calculate how much air your tree filters per year. Calculate an isolation value of your tree compared to other trees on campus (calculation form provided).
Week 8	Conservation solutions	Reflect on the limitations of the MyTree data collection methodology. Research tree conservation measures and policies, such as Tree Preservation Orders.

6) Green Skills developed:

Occupational/ Technical Skills: Data analysis, Environmental knowledge and awareness, ICT skills, Monitoring skills, Research skills, Science skills, Technological skills.

Transferable Skills: Critical thinking and reasoning, Problem-solving, Empathy, Participatory skills

Transformative Capacities: Environmental stewardship, Future and anticipatory thinking, Interrelational thinking, Reflexivity

7) Contribution to Leverage Points:

LP7: Futures literacy through a values-based mindset: MyTree participants report that focusing on a single tree enables them to establish a sense of environmental stewardship not experienced in previous environmental education.

LP9: Responsible data and technology solutions: alongside internal assessment, students submit records to national citizen science projects, allowing their data to contribute to wider environmental research. Students also learn about the strengths and limitations of digital and AI-supported identification tools.

8) Impact/Successes/Challenges:

In terms of impact, the project helps students connect abstract environmental concepts to their everyday surroundings. As one student reflected: *"It really opens your eyes to how much biodiversity is out there and right on your doorstep."*

The project also provides authentic research opportunities. Long-term data collected through MyTree has supported undergraduate research projects investigating both autumn senescence trends and methodological reliability.

The MyTree approach has enhanced inclusivity in the development of technical field-based green skills. Students who experience barriers to participating in residential field trips have reported that this module allows them to develop field skills at a time and pace that suits them, enabling them to balance skill development with other commitments.

Although many students described the experience as transformative, some students report feeling pressure to participate for assessment marks which reduced feelings of autonomy, while others felt pressured by deadlines or were uncomfortable photographing trees in busy public areas. Tree location and student safety also required consideration during project planning.

9) Advice for others

MyTree demonstrates the value of low-cost, place-based field learning at a time when fieldwork opportunities are thought to be declining across HE due to financial, administrative, and time pressures. By centring learning on a single campus tree, this approach appears to foster particularly strong feelings of ownership, environmental stewardship, and long-term connection with nature as demonstrated by this final quote:

"I still have the pictures on my phone just to give a little look at my little baby, my tree, my child, to see how it grows over time." (student)