

The University of Northampton Technical Innovation for Sustainability Biodiversity Index

biodiversity index

Section 1: About the project

Summary

The Biodiversity Index is an interactive web-based tool that enables people with little knowledge of ecology to undertake a rapid but scientific assessment of the level of plant diversity on any UK site. It is effectively a pre-phase 1 ecological survey; a first step to gaining an understanding of habitat types, vegetation structures and plant diversity.

It enables an organisation to undertake a simple ground survey, to identify the size of these areas. A scientific algorithm is applied to the collected data, generating a numerical index score which can be used to compare sites or monitor changes over time.

The tool produces a highly visual summary and report for each site, offering tips, signposts and suggestions for enhancing biodiversity; many of which could be cost neutral or actually save money. The Biodiversity Index is a first step for anyone to gain an understanding of habitat types, vegetation structures and plant diversity, without the need for specialist ecology knowledge. It is believed to be the first of its kind in the world.

Project partners

The Biodiversity Index is an example of innovation and collaboration between the University's academic staff in its School of Science & Technology and professional services staff within Infrastructure Services. The tool shows the practical side of the University's academic research into species diversity, pollinator behaviour and plant reproductive success, in order to help organisations understand issues critical for the sustainable future of humanity. The project was jointly funded by HEFCE's LGM Fund and the University of Northampton.

Section 2: The results

The problem

The Biodiversity Index came about from the self-realisation that, although the University had on-going academic research into ecology and biodiversity, the staff responsible for strategic management of environmental policy at an estates level did not know much about ecology and biodiversity on site. Although they had instructed consultants to undertake ecological surveys on their behalf, these did not really provide any practical hands-on value to the individual staff members concerned.

The thought dawned that if this was the situation in our organisation, how prevalent must it be in other organisations across the country.

Profile

- The University of Northampton
- 14,580 students (includes full and part time students)
- 1,720 staff
- Two suburban campuses

Category supported by





The approach

One of the key outcomes from the project's initial 'Biodiversity Summit' was the realisation that biodiversity is of interest to a growing number of public and private sector organizations; however, few employees have the knowledge to understand or manage biodiversity at a site level. Following an extensive academic literature review and assessment of existing ecological assessments, it was decided to create a practical tool, grounded in scientific research, to help individuals and organisations take a first step towards understanding biodiversity on-the-ground. The Biodiversity Index was then collaboratively developed by the University's Infrastructure Services team and Natural Environment Research Group, to help fill this knowledge-gap.

Our goals

- Getting facilities managers interested and talking about biodiversity, rather than just focusing on carbon, water or waste;
- Encouraging staff to go outdoors to see the types of habitats on site;
- Providing a quantitative assessment tool to directly compare sites;
- Inspiring a generation of children and young people to study ecology, biodiversity and STEM subjects.

Performance and results

The Biodiversity Index has already come a long way from concept to reality, and has started to see our goals come to fruition; with 60 FHE institutions in the UK already signed-up to use the tool, and a number of schools, hospitals and councils also on-board. The NHS Sustainable Development Unit is currently trialling the tool in partnership with an NHS Trust, with a view to providing insight into its use within the healthcare sector.

Section 3: The future

Sharing your project

The Biodiversity Index is available to be used free of charge by schools, colleges and universities in the UK. There is also a chargeable version for use by the wider public and private sectors.

The tool was launched at the EAUC conference in April 2013 with a workshop dedicated to understanding the science behind the tool and an exhibition demonstrating its practicalities. Following the popularity of the workshop, the Biodiversity Index team has hosted a webinar on the Sustainability Exchange.

The tool is currently designed for UK habitats and plant life, but the team is investigating how it could be replicated in other countries with different vegetation structures and habitat types.

What has it meant to your institution to be a Green Gown Award finalist?

Being a finalist has acknowledged the distinctive collaboration between academic and professional services staff at the University who have created an innovative tool to help anyone take initial steps to understand biodiversity as a critical resource. This has enabled the tool to have wider coverage both within and outside the FHE sector.

Further information

View it at: www.BiodiversityIndex.org

Contact us at: BiodiversityIndex@northampton.ac.uk