

Resident Biodiversity
Cambridge, United Kingdom

Anglia Ruskin University Residential Service

BIG Biodiversity Challenge Award category: Medium Scale Permanent Award

Project overview

Areas identified as suitable through a phase 1 survey. This was done by collaborating with life sciences students to assist Residential Service staff managing the project. Funding was sought through Kew Gardens' Grow Wild scheme which purchased; wildflower seed, native trees and interpretation boards for all areas. Staff students and local community carried out the planting and sowing.

An area around the wildflower beds was left for grass to grow. Invertebrate data collected for grassland alteration study. Identification workshops with students to record order level diversity of invertebrates. Workshops to create 'homes for nature'. BBC Radio Cambridgeshire, Cambridge 105 and Cambridge Evening News covered the project.

What were the biodiversity conditions on site, prior to the enhancement?

Amenity grass areas cut 4 times per year. Seldom used by residents these areas were managed for tidiness.

Were there any specific conditions that led to you carrying out this work?

Gardens were seldom used areas for residents. We have residents, students and staff from all over the world passing by or living with these areas. As such they are a perfect opportunity to increase awareness of biodiversity, to produce a social and environmental norm of appreciating and encouraging urban biodiversity. A culture that may be taken home and spread across cities globally.



One of the student gardens before alteration. This path is used by 4 houses totalling 206 residents and their friends using it on a daily basis, with nothing to look at 😊

What were the biodiversity measures taken?

The project is the first in the UK to use student gardens as a site for the development of biodiversity and was awarded funding for its unique position to engage with the 18-25 age group.

We sowed native wildflowers, planting native shrubs and trees and created structures to attract and sustain native populations of wildlife in a range of student gardens and holding events to inform and record to also engage students. Log piles, bird boxes and insect homes have been built by students, staff, and local people and installed in the gardens. Local media and the interpretation boards engage with the local community explaining aspects of ecosystem function and providing links for further involvement and resources.

Native trees and a native wildflower mix were introduced to provide habitat and a food source. Following the phase 1 survey all gardens without native trees were planted and an area between 2 and 6 square meters was sown with the seed mix.

An area was also left to grow throughout the year to provide opportunities for grasses and other herbaceous plants to complete life cycles. This 'unknown' diversity is the most valuable as the plants succeeding in these gardens can compliment the ecosystem relationships by occupying their specific niche.

Six gardens provided data for a preliminary study the remaining 20 were separated into experimental and control sites. Each was then separated into two sectors and the flowering plants species and invertebrate orders identified over two years to provide a before and after picture of invertebrate diversity.



One half of the same garden in it's first summer, with interpretation board detailing project overview, names of plants and some insect life cycles.

What were the biodiversity measures taken?

The introduction of wildflowers and trees has increased plant diversity in the experimental gardens. The effect on invertebrate diversity is currently under analysis.

This model is now being rolled out across the green areas of the remainder of the campus through The Faculty of Life Sciences in collaboration with the Environment Team.

Borders for the experiment areas are being made by using locally sourced logs from a council used wood yard.

How would you best describe the project?

An enhancement

Further information

The initial goals of providing a space for my friend Alex's favourite leafhopper and other insects with some habitat have been surpassed. I still have to produce recreated the project areas in the ten remaining control gardens now the data is collected. I have started a 38 Degrees working group to roll this project out across Cambridge student and private sector residential gardens. This should produce a city wide culture of protection and appreciation for urban biodiversity resilience that can be copied by other cities.

The project would have benefited from a transect count of pollinators to add to data resolution.

This project has provided me with direction in life, it has made me a better communicator, a better manager and an ecologist but above all it has made me a valued and supported member of the community.

(In your response please consider the following: Installation – how was it installed, step by step overview; Revisiting the scheme (if applicable) – what are the long term benefits, has there been a noted increase in biodiversity, have objectives been met? Lessons learnt – would you do anything differently, any tips for similar schemes?)



The first of 40 'native wildlife images on local wood' produced by local artist Julie Rossiter who was inspired by the presentation of this project and the Cambridge Sustainability Art Residency July 2016

What was your personal motivation for carrying out the enhancement?

I wanted to be able to make a difference to the life of an organism. To have a useful input into the challenges facing cities. I wanted to make biodiversity enhancement my business as a member of the University, the city and the human species.