

Trinity's thriving flora and fauna

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The collaboration of the Grounds and Gardens Committee with the Provost over the past decade has led to major changes in the landscape of Trinity.

RIGHT – The lawns that surrounded the Burke and Goldsmith statues at Trinity's front entrance have been replaced with wildflower meadows.

Flora – The major drivers of change have been our desire to make the landscape more biodiverse, pollinator-friendly, attractive, user-friendly, easily maintained and sustainable, given the challenges of climate change. We are fortunate in having a highly dedicated and skilled grounds team who are developing policies that ensure that we minimise (effectively eliminate) pesticide and herbicide use, thereby reducing Trinity's environmental footprint. Today, any habitat that requires maintenance is closely surveyed and monitored to protect that habitat and the species present.

In terms of plants, there are many contenders for the most striking change to the landscape. Many would cite the demise, through ill-health, of the iconic Oregon Maples likely planted by the famous Trinity botanist Thomas Coulter about 1840 in Library Square. This sad event, however, opened up the Square and allowed it to be reimagined. We have installed a completely different but every bit as attractive species, *Ginkgo biloba* (Maidenhair Tree) with nearby stone seating (due to the generosity of an alumnus). Ginkgo was chosen for a variety of reasons. It is, in China, sometimes called 'silver apricot' which aptly describes the seed (often mistaken as a fruit) which has a distinctive odour and is used in Chinese, Japanese and Korean cuisine. The species is very resilient, being resistant to disease, air pollution, fire, and to some extent drought; amazingly, individuals growing within 1,500m of the hypocentre of the atomic bomb blast in Hiroshima survived. It is of academic interest to many Schools in College as it has a fossil record



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dating back at least 200 million years, with individuals that can live for about 1,000 years; it is of medicinal use, has symbolic meaning for a number of faiths, has exceptional autumn colour, is biologically unique, is an excellent example of conservation being effected through cultivation and is highly attractive to pollinating insects.

Others might point to the planting of new trees – there are now 466 trees in total on Trinity's campus. These mainly deciduous trees range from all over the world and include 12 species of maple, seven species of oak, magnolia, rowan, ash, mulberry, arbutus, alder, birch, wild cherry, holly and hawthorn and a number of palm trees, including one planted by the Indian Ambassador to honour Mahatma Gandhi. At Santry we aim to plant about 2,000 young trees (whips), largely of native species, over the next five years or so. This will, we hope, somewhat mitigate the College's carbon footprint but substantial impact will only come from planting on a bigger scale and this requires space that currently we do not have.

Others might single out the change from manicured, pollinator unfriendly lawns with inherently low biodiversity to areas rich in biodiversity (in total ca. 2,000 m² has been converted). The lawns that surrounded the Burke and Goldsmith statues at the front entrance to the College have been replaced with wildflower meadows, as have lawns near the Lincoln Place entrance, and next to the old Board Room and at Santry. We have also adopted a reduced mowing policy in the renovated Provost's garden (at his instigation). The pollinator resource of Trinity has been hugely increased and we have emphasized

our commitment to tackling the biodiversity crisis; thankfully these areas also look highly attractive.

Others might point to the enhancement of the working environment due to the new courtyard / indoor gardens in the Arts, O'Reilly, Hamilton and Watts buildings and the Smurfit Institute. Together with the ongoing renewal of the courtyard gardens, the landscape of the Trinity Centre at St James's Hospital, the garden surrounding the Chief Steward's House, and the two pioneering living walls at the new Trinity School of Business, this amounts to a significant increase in the biodiversity of the College – and its look has improved too.

Others might point to the development of seating areas on the campus such as in the 'Flat Iron' or in the O'Reilly or to the planting of many of the roofs of the College so that they are green.

Perhaps the development of which one can be most proud is the new square developed between the Fitzgerald and Botany Buildings. It realises many of our aims in the one space; it is highly biodiverse, people and pollinator friendly, offers a huge amount of seating (it is probably the most popular outdoor venue at the East end of College), contains a substantial number of newly-planted trees, is relatively low-maintenance and looks excellent throughout the year.

It is vital that the College continues to invest in developing and maintaining a dynamic landscape, responsive to change and societal needs. The new developments planned for the College (E3, Printing House Square, the Historic Buildings refurbishment project, the Old Library project) will do just that.

LEFT – The planting of one of the new *Ginkgo bilobas* (Maidenhair Tree) in place of the Oregon Maples in Library Square.

BELOW – Sam, the resident Trinity fox playing with one of her cubs.



Fauna – Trinity is home to a surprising array of wildlife considering its location in the heart of Dublin city. Given the expansion of our urban areas over the last few decades Trinity, along with our city centre parks, has become a vital oasis for biodiversity in an otherwise concrete jungle. In 2014 a 24-hour bioblitz (rapid recording of observed flora and fauna in a specific area) of the campus recorded 346 species of plants and animals, a significant number given the time restraints in such an exercise.

Since 2014 the campus has become even more attractive to wildlife, largely because of the implementation of the all-Ireland pollinator plan conceived by Jane Stout, Professor in Botany. This plan aims to improve habitat for pollinators such as solitary bees and bumblebees by improving existing habitats, reducing pesticides and encouraging the growth of native wildflowers on which native pollinators rely.

The creation of Trinity's wildflower meadows has drastically improved the number of pollinators and other invertebrates on campus. This draws in other animals higher on the food chain who feed on them and, in turn, the predators who prey on those creatures. Last summer we recorded pipistrelle bats feeding on moths directly over the wildflower meadows at night; swifts and swallows were doing the same during the day. Thrush, blackbirds, goldfinches and wood pigeon all use the area for feeding and these birds provide food for birds of prey like the sparrowhawk. The wildflower meadows are a wonderful example of how a small change can really help biodiversity, even in a city centre.

As well as the wildflower meadows, the Provost and Chief Steward's gardens have, in recent years, been made incredibly wildlife friendly. A recent survey of the pond in the Chief Steward's garden recorded 20 species of aquatic invertebrates, including dragon and damselflies as well as common frogs. This would not have been possible only for the efforts of the grounds and garden staff who have embraced the new nature friendly approach to managing these areas. Fallen logs are left to rot in the ground along with piles of leaves, providing valuable breeding and feeding areas for numerous insect species. Dublin city centre's only population of frogs also make use of these natural structures, for shelter and hunting.

As well as the many species of invertebrates, amphibians and birds, the campus is also home to a rather charming family of urban foxes who have become somewhat famous over the past year or so, entertaining and enchanting students, staff and visitors to the College. The breeding pair of foxes, affectionately named Prince and Sam, are thriving with Sam having delivered a litter of seven cubs in Spring. The abundance of prey species living on campus allows these beautiful mammals to survive very comfortably without relying on the scraps leftover by humans, as demonstrated over the recent lockdowns. Discarded fast food was off the menu due to the lack of human activity in the city centre so the foxes reverted to hunting woodpigeon and young seagulls as well as feeding on worms and other smaller creatures around campus. This is a testament to the increasing biodiversity on campus which will only improve as more efforts are made by staff and students to enrich our College for nature and make it an even more attractive oasis for wildlife.