

# The Botanic Garden, Durham University



Our 10 hectare university Botanic Garden is set amongst beautiful mature woodlands on the southern outskirts of Durham city. We provide an academic resource to the university for teaching and research, as well as offering educational visits to schools.

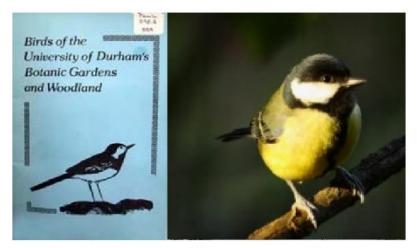
Also open to the public, the Botanic Garden is a leading attraction in Durham, with guests young and old visiting throughout the year. Wander through the alpine garden, winter garden, bamboo grove, glass houses and our recently developed woodland garden and wild flower meadow.

## HERITAGE

The first Botanic Garden in Durham was founded in 1925 when the grounds of the science laboratories were laid out as an experimental garden. As the sciences expanded within the University and more buildings were constructed the garden decreased proportionately. It was decided in 1969 to move the garden to a new site where it could develop undisturbed and develop an identity of its own.

The Botanic Garden has been on its current site since 1970. It was created primarily for teaching and research. As the garden matured a Visitor Centre was built and opened in 1988 by Dame Margot Fonteyn, the Chancellor of the University at the time, to accommodate the 6,000 annual visitors. The garden now attracts over 80,000 visitors annually.

An excerpt from a 1985 guidebook is below. It tells us about the development of the garden and about the dedication of the people involved in caring for it.



THE 1985 BIRD GUIDE

The following information has been copied from a pamphlet "*Birds of the University* of *Durham Botanic Gardens and Woodland*", which was written in 1985 by Kathleen O'Brien. The original pamphlet can be found in Durham University Library.

"It is with much pleasure that we are able to publish this list of birds, carefully prepared by Mrs Kathleen O'Brien, giving at a glance some indication of the wealth of wildlife (apart from the plants) to be found associated with the University Botanic Garden and surrounding woodlands. A more detailed study reveals many as seasonal visitors to the area, doubtlessly encouraged by a management policy now operating in the woodlands for some decades of encouraging our native broadleaved trees and planning operations to encourage the amenity or conservation interests of the area rather that short term financial gain.

"Kathleen is well-known to bird-lovers in the area and hopefully her list will encourage many more potential bird lovers, possibly initially attracted to the area because of the variety of plants cultivated in the Botanic Garden or the beauty of the woodland walks. And it is well known that plant lovers are of course nature lovers in the broader sense. More details about the R.S.P.B. and their valuable work can be had by dropping a note to her at South Lodge, South Road, Durham."

You can read more sections of old guidebooks of the gardens here: https://www.dur.ac.uk/botanic.garden/aboutus/history/

## **CONSERVATION AND BIODIVERSITY**

Conservation and biodiversity are key factors in the maintenance of the Botanic Garden. Pesticides are not used in the garden, and a small of flock rare breed sheep are used to graze our arboretum and wildflower meadows. There are also displays of native plants such as cornfield annuals and a magnesian limestone outcrop. There is a bird hide and feeding station in the garden, and bird and bat boxes are maintained in our local woodland. During the summer months it's possible to visit our apiary and see the bees at work from a glass observation hive.

Durham University is committed to increasing and enhancing biodiversity on its campus. For more information please click here.

We are very grateful to our conservation volunteer students who have helped us over the years with planting, weeding and coppicing.

### **Durham Wildlife Trust and Biodiversity Partnership**

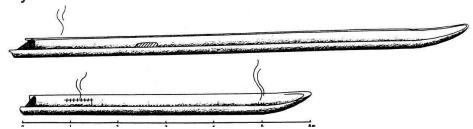
We also support the work of Durham Wildlife Trust and the Durham Biodiversity Partnership. Over the years we have grown thousands of plants to support various projects to help:

- Marsh Violets (*Viola palustris*) the larval food plant for the small, pearl-bordered fritillary butterfly.
- Rock Rose (*Helianthemum nummularium*) the larval food plant for the northern Argus butterfly.
- Blue Moor Grass (*Sesleria caerulea*) a nationally scarce plant which is restricted in the UK to the upland grasslands of the northern Pennines and magnesian limestone grasslands of Durham and Tyne & Wear.
- Common Reed (*Phragmites australis*) to provide and improve habitats for otters.

#### SCIENCE IN THE GARDEN

Durham University Botanic Garden is a working Botanic Garden which, as well as being open to the public, aims to support the teaching and research of Durham University's students. For this reason many of the plants in the garden have been chosen for their scientific, alongside their decorative, interest. As a result the Botanic Garden contains a wide variety of rare, fascinating plants that makes it a must-visit for plant lovers in the North East. Apart from the scientific significance of its flora and fauna, the garden has also been chosen very often as the location for hosting various projects originating from different departments of the University.

Below you can read about present and past projects in the garden, and find out more on how the garden and the scientific community collaborate with each other.



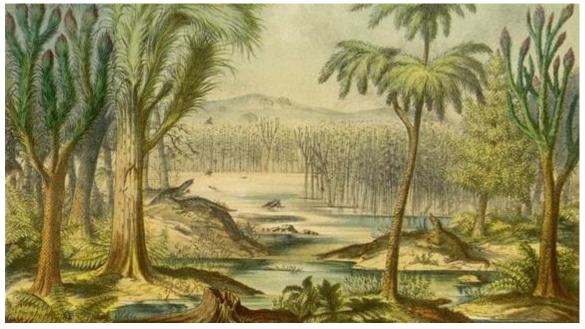
### Durham University Archaeology Department Experimental Dugout Canoe Project

In October 2014 Jake Newport and his team of volunteers from the Durham University Archaeology Department started Durham University's latest and arguably most ambitious experimental archaeology project to date. The team aims to construct a dugout canoe based on Mesolithic dugout canoes found across Northwest Europe. The dugout canoe, once completed, will be used to help answer research questions on boat use and seafaring in the Mesolithic and to provide a physical representation of how these impressive artefacts looked, felt and worked for the benefit of academics and the public alike.

The project is taking place at the Botanic Garden, Durham University. Although the work is currently happening behind the scenes, a path will be later opened to allow visitors to see it.

To know more about the project and follow its updates, please visit: https://www.facebook.com/Durham.University.Experimental.Dugout.Canoe

#### Carboniferous Garden



Some students from our Department of Earth Sciences have created a Carboniferous Garden telling the story of coal in County Durham. The story starts with a large tub of coal by the greenhouse. For more information visit: https://www.dur.ac.uk/botanic.garden/whatshere/carboniferousgarden/

### ART IN THE GARDEN



In addition to the exhibitions of local artists' work frequently displayed in our Visitor Centre, the Garden itself serves as a canvas which plays host to some unique pieces of artwork. Hidden within the pathways, trees and gullies of the Botanic Garden reside several sculptures for you to discover. This juxtaposition of art and nature offers a distinctive touch to garden, with children and adults alike enjoying exploring the tangible sculptures.

### **Millennium Bug**

Inspired by the Millennium, two local artists, Graeme Hopper and David Buxton, took 8 months to create a giant bug and her offspring, seen above. It has been always very popular with visitors, with kids and adults alike who have been enjoying exploring this strange life-form which have become since its installation a very much loved and distinctive feature of the garden.

Another example is a Basil Bunting Inscription. The poet Basil Bunting is synonymous with literature in the North East. At Durham University the Basil Bunting Poetry Centre fosters study and research on the Northumbrian poet, and on poets associated with him through the region, or on the modernist/post-modernist tradition. In honour of this connection, an inscription of one of Bunting's most entertaining and illuminating quotes is displayed in the Botanic Garden.

## **GLASSHOUSES**

Our glasshouse is located close to the main Visitor Centre and is accessible by wheelchair users. It is divided into sections to show a range of plants from different habitats. The glasshouse is also home to our tropical bugs and, at certain times of the year, butterflies. Our indoor activity space, the Glassroom, is contained within the glasshouse.

The Tropical House represents the warm, humid environment of a rainforest, complete with (at the press of a button) real rain! Here you will find bananas, sugarcane, coffee, giant bamboo, epiphytic orchids and bromeliads. There are also

climbers including 'Dutchman's Pipe' and the magnificent 'Jade Vine', which normally flowers in April.

At the opposite end of our planet's ecosystem, the Cactus House represents the dry, bright conditions of a desert and provides year round interest. Here you will find Prickly Pears, Barrel Cactii, Aloes, Agave and a variety of succulent plants. There are plants from Brazil, Mexico, Bolivia, Peru, Africa and Madagascar. Prepare to take a step into the exotic and explore this desert landscape.



#### MAGNESIAN LIMESTONE FLORA

Common Rock-rose (Helianthemum nummularium) Photo Credit to Dave Mitchel

Magnesian Limestone, often called Dolomite, was originally formed in the shallow tropical Zechstein sea some 250 million years ago, and now outcrops in only a few places in the North East of England. The limestone weathers to form thin, lime-rich soils, the specific composition of which allows the growth of unique wildflower meadows native to the North East.

In the Botanic Garden we have aimed to reproduce this regional curiosity with our own Magnesian Limestone habitat. This bed was created in 2005 to showcase some of the wildflowers that can be found amongst the several Magnesian Limestone areas in the North East. Twenty tonnes of large boulders were used to build a raised bed adjacent to a footpath for easy viewing. The wildflowers are at their best in early July but the real gems are the local Magnesian limestone meadows, some only a few miles from Durham, which are well worth a visit.

You can also follow the link below and use this interactive MAGIC map to explore and discover the wide range of habitats in your area. To discover the Magnesian Limestone sites select Habitats, Grassland then specify "Lowland Calcareous Grassland".

Explore the Magic Map, http://www.natureonthemap.naturalengland.org.uk/

#### NATIVE WOODLAND



The central areas of the Botanic Garden are surrounded by woodland native to the British Isles. This provides a beautiful backdrop to the garden, isolating it from the bustle of the outside world. A woodland trail leads from the garden to our wildflower meadow, following a calm steam and crossing small bridges. Alternatively, the extensive woodland is perfect for those looking simply to escape from the world and get back to nature, with a peaceful wander along forest paths perfect at any time of the year.

Dead wood is an important wildlife resource in woodlands, playing host to fungi, wood-boring beetles and birds like the great spotted woodpecker. Unsafe branches are removed, but then left to decay amongst the leaf litter, where they continue to enrich the woodland's wildlife for many years. Occasionally a tree may be felled by a storm and shafts of sunlight will reach the forest floor through the gap in the leaf canopy, allowing the next generation of saplings to grow towards their place in the sun. This is part of the natural cycle of regeneration in old woodlands. This woodland consists mainly of Oak and Beech trees with a small number of other species such as Rowan, Birch and Sycamore.

### **TROPICAL BUGS AND INSECTS**



The glasshouse contains several large tanks, housing habitats for the Botanic Garden's collection of tropical insects and bugs. Seeing these creatures up-close is a highlight of many people's tour of the Garden, especially children!

Our family of insects, arachnids and other creepy-crawlies stretches from around the world, with tropical beetles and millipedes accompanying scorpions from the dry heat of the desert. The collection's centrepiece is our tarantulas, huge spiders that scare and fascinate in equal measure.

During specially organised events, our gardeners bring out the insects for closer inspection by the public. Children may even have to opportunity to handle the creatures (don't worry, they're not dangerous)!



### VISITOR CENTRE

The Garden's Visitor Centre has a Coffee-Shop which offers a wide selection of hot and cold drinks, sandwiches and an extensive range of snacks and bakery items. This is the perfect place to unwind after a stroll around the Botanic Garden. During the year our Coffee-Shop also serves as an exhibition space to showcase the work of local artists and photographers, many of whom offer their work for sale. Such artwork provides added interest when sipping a hot chocolate on an autumn afternoon. It is also possible to hire our Visitor Centre in the evenings, Monday to Saturday, from 6.30pm.

The Botanic Garden's Gift Shop is full of unique and lovely items, many not found anywhere else in Durham. We have a great range of gifts for the keen gardener; with various sized seed boxes, string holders, watering cans and some easy size garden trug and gloves for gardening beginners.

For more information see https://www.dur.ac.uk/botanic.garden/ or even better, come and see us!