



PLANTS PEOPLE
POSSIBILITIES

Press information 2010

Horticulture and Landscape at the Royal Botanic Gardens, Kew

The living plant collection at the Royal Botanic Gardens, Kew, reflects global plant diversity and provides a reference source for botanical and horticultural science and biodiversity conservation. It is the largest and most diverse living collection in the world.

Spread between the gardens at Kew and Wakehurst Place, the different growing conditions available at the two sites allows two different but complementary collections. Plants are included in the collection primarily for their botanical and horticultural interest, scientific or educational value. Many of the species are endangered in their natural habitats – the Royal Botanic Gardens, Kew has an important role in biodiversity conservation as threats to the world's vegetation escalate.

Specimens of endangered plants are cultivated and propagated for distribution to other botanic gardens and, where possible, returned to their habitats. The unrivalled living collections are a resource for botanical science worldwide, whether for pure scientific investigation or for their utility to man. Most importantly, the living collections and the horticultural skill that cares for them are a resource for *ex situ* conservation of plant diversity and its integration with habitat restoration and species reintroduction.

Horticulture on site supports the research programme and is also responsible for a high-quality visitor attraction. Horticultural teams have a key role in planning, creating and maintaining areas across the Gardens. This includes heavily managed areas such as the Azalea garden, bamboo garden and order beds, through to wilder areas such as the Arboretum and area around the Lake. The tranquil conservation zone around Queen Charlotte's Cottage is managed as native woodland and is home to the finest bluebell woods in London. Native plants and animals are encouraged in the nature reserve, which is managed using traditional techniques such as coppicing. Bluebells flourish in the spring and among the birds that can be seen are tawny owls, blue and great tits, sparrowhawks and green woodpeckers. The area also supports a thriving insect population, including rare hoverflies. Rare birds include the little owl and lesser spotted woodpecker.

Horticulture students come from around the world to study at Kew for one of the world's foremost qualifications in botanical horticulture – the three-year Kew Diploma. The course offers broad-based training in amenity and botanical horticulture. The aim is to provide students with an opportunity to study scientific and technical subjects at first degree level, whilst gaining practical experience and responsibility working in one of the world's foremost botanic gardens. www.kew.org/education/diploma/index.html

History

There has been a garden at Kew since at least the early 17th century. In 1718 the heir to the throne came to live at Richmond Lodge – then a much altered version of James I's hunting lodge. Prince George, with his wife Caroline, developed a garden and landscape park next to the river. In 1727 they were crowned George II and Queen Caroline. In the early 1730s their son Frederick, the Prince of Wales, began to lease lands to establish an estate that ran parallel to his parents' grounds. These two estates are the basis of Kew today and are the reason why Kew is still known as the 'Gardens' (plural).

Queen Caroline hired Charles Bridgeman and William Kent – the fathers of the English Landscape Movement – to transform her Richmond estate into the latest naturalistic fashion. Prince Frederick was an avid gardener and while he appreciated the landscape movement, he

also wanted to create a botanical collection. He set about transforming his garden to include a large lake, follies, and the planting of many hundreds of interesting trees.

George III, son of Frederick and Augusta, inherited both the Kew and Richmond estates and merged them in 1802. Lancelot 'Capability' Brown had been employed to redesign the Richmond garden in the 1770s and swept away many of Caroline's follies and features. Impressed by the adventures and scientific knowledge of Sir Joseph Banks, George III handed over unofficial charge of the Gardens to him. The subsequent fame of the Gardens is largely down to Banks' vision.

When both George III and Joseph Banks died in 1820, the Gardens fell into decline and in 1840 they were adopted by the nation. In 1841 Sir William Hooker was appointed the first official Director of the Gardens and was succeeded by his son, Sir Joseph Hooker.

Facts and figures

- Kew Gardens receives over 1.35 million visitors a year.
- The Gardens covers 326 (132 ha) acres.
- Kew has three nurseries, the Tropical Nursery, the Melon Yard and Arboretum. The nurseries propagate plants for research, the public glasshouses in the Gardens and other institutions. They act as a living library of plants for scientists and provide a living gene bank of rare and endangered species.
- The Tropical Nursery at Kew contains 40 plants which are extinct in the wild and over 1,000 which are critically endangered.
- The largest area under glass at Kew Gardens is the Tropical Nursery, 6500m², which is not open to the public but is used for propagating orchids and plants from the moist tropics (rainforests), dry tropics (cacti and other succulents) and the temperate tropics (including threatened island flora and carnivorous plants).
- Café Marron (*Ramosmania rodriguesii*), is endemic to the Mauritian island of Rodrigues. Thought extinct for 40 years, one tree was rediscovered by a local school boy and cuttings were sent to Kew Gardens in 1986. In 2001 Kew Gardens' propagation team were successful in growing the plant and sent eleven rooted cuttings back to the islands to be reintroduced. Although Café Marron regularly flowers at Kew, it had never set seed until horticulturists made another breakthrough in successfully pollinating the flowers. In 2003 the Café Marron bore its first fruit with viable seeds. The seedlings are now thriving in Kew's nursery.
- The Biotechnology Conservation Unit is over 30 years old and was set up to propagate plants that are rare, endangered or difficult to grow conventionally.
- 3,000 species have been grown by the Biotechnology Conservation Unit since it was established. Successes include the reintroduction into the wild of one of the UK's rarest orchids, the Lady's slipper orchid (*Cypripedium calceolus*).
- The Princess of Wales Conservatory displays the *Titan Arum* – the biggest 'flower' in the world. It grows from a huge corm and comes from the Sumatran rainforest in Indonesia. The corm can weigh up to 94 kilos (recorded at Kew) which takes four people to lift!
- The carnivorous plants collection in the Princess of Wales Conservatory is one of the most comprehensive in the world and includes Sundews (*Drosera*). Sundews' leaves are covered with glistening, sticky droplets of dew which trap insects. An insect which mistakes the dew for nectar and lands on on a Sundew leaf soon becomes trapped and the leaves fold over the insect to make digestion more effective. They can digest a mosquito in 24 hours!
- Kew has the largest collection of orchids in the world, with around 3,000 different species and 8,000 plants. Visit part of the collection in the Princess of Wales Conservatory.
- Visitors to the Palm House can see the giant bamboo, the fastest growing plant on the planet. In its natural habitat it can grow 1 metre a day and up to 35 metres tall; bamboo is the largest member of the grass family.
- One of the oldest glasshouse plants in the world, *Encephalartos altensteinii*, is found in the Palm House. This cycad was originally from South Africa and arrived at Kew in 1775.

Ends

Contact the Royal Botanic Gardens, Kew press office on telephone +44 (0) 20 8332 5607 or e-mail pr@kew.org