

Role of the Royal Botanic Gardens, Kew

The mission of the Royal Botanic Gardens, Kew is ‘to enable better management of the Earth’s environment by increasing knowledge and understanding of the plant and fungal kingdoms – the basis of life on Earth’.

How does Kew fulfil this?

The Gardens have developed from their 18th century origins to form a unique cultural landscape. Kew is recognised as a world class scientific institution, holds botanical collections of global significance, and has been designated a UNESCO World Heritage Site. Kew’s 700 staff and 350 volunteers also welcome over a million visitors a year to Kew Gardens in London and Wakehurst Place in Sussex. The Royal Botanic Gardens, Kew is funded by the UK government, visitor revenue and charitable donations.

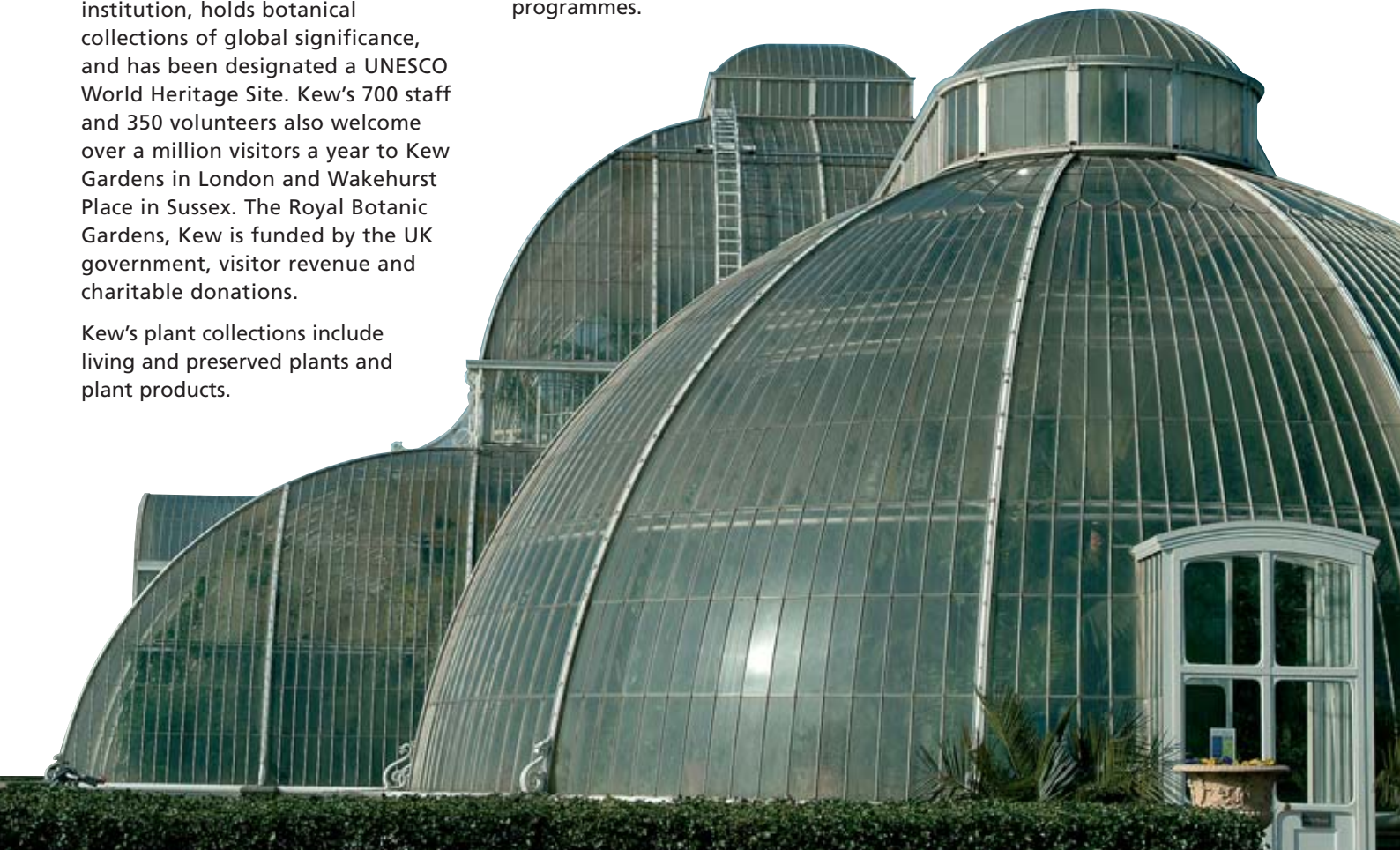
Kew’s plant collections include living and preserved plants and plant products.

The living collection is the most comprehensive in the world, with around 30,000 different kinds. Plants are included in the collection primarily for their scientific or educational value and many of them are actively used in Kew’s research programmes.

Many species grown at Kew are endangered in their natural habitats and Kew is increasingly involved in their conservation as threats to the world’s vegetation escalate.

Specimens of such plants are cultivated and propagated for distribution to other botanic gardens and, wherever possible, returned to their natural habitats.

Kew’s Millennium Seed Bank, at Wakehurst Place, plays a key role in this aspect of Kew’s work, preserving seeds of species from around the world that are endangered and potentially threatened to aid in their protection. The Seed Bank aims to collect at least 24,000 plant species from all over the world by 2010 to help reduce the risk of plant extinctions and increase the chances of successful re-introduction of plants into their native habitats. The native flora of the UK has already been successfully collected.



A wealth of information

Kew's preserved plant collection consists of over 7 million specimens of dried or spirit-preserved plants and fungi housed in the Herbarium and the Jodrell Laboratory. It represents nearly 98% of all the plant genera in the world and has the largest collection of historical plant specimens. These include 'types' (which define species names), and original specimens collected by famous naturalists such as Charles Darwin. Botanists from around the world use the Herbarium together with the living collections to help study plant characteristics and catalogue the diversity of the plant kingdom.

Kew's library is probably the most comprehensive botanical library in the world, with over 150,000 books, 200,000 prints and drawings, 4,000 periodical titles, 150,000 pamphlets and an extensive archive.

Scientists in the Jodrell Laboratory study plant structure, plant and fungal DNA, chemistry and genetics. Their research complements the taxonomic studies of the Herbarium as well as helping to identify plants of economic importance and supporting the conservation of plants. Included in the benefits emerging from their research are improved understanding of plant-animal and fungi-plant interactions

as well as the authentication of plants currently entering the trade.

Kew's Economic Botany Collection holds more examples of how plants have been used by people around the world from ancient Egyptian times to the present day. Highlights of the collection of 80,000 plant raw materials and products are on display in the Plants+People exhibition in Museum No.1.

Who is this knowledge shared with?

The knowledge and expertise of Kew's scientific and horticultural staff is shared with other professionals and the public through collaborations, publications, online resources, scientific conferences, and educational programmes including internships and studentships.

Among the programmes for specialists are the three-year Kew Diploma in Horticulture, and courses on Herbarium Techniques, Botanic Garden Management, Plant Conservation Strategies and Botanic Garden Education.

Others, open to all, cover topics as diverse as landscape design, botanical illustration, plant photography, and how to make willow hurdles! The schools' education programme at Kew and Wakehurst holds training days for teachers and study days for children, catering for more than 95,000 individuals each year.

Kew's annual events programmes also include many education days such as 'Fungal Forays', and our team of Volunteer Guides offer informative tours of the Gardens almost every day. A community education programme works with local ethnic and special needs groups to enhance their contact with Kew's work.

Kew advises the UK government and works with scientists and policymakers around the world to help increase knowledge and understanding of the plant and fungal kingdoms. Kew leads and contributes to many national and local projects in countries worldwide to enable better management of the Earth's environment for the benefit of everyone.



The Living Collections

The Herbarium

The Millennium Seed Bank