

Giant London glasshouse to reopen with world's rarest plants

February 14 2018, by James Pheby



The Temperate House, is the largest surviving Victorian glasshouse in the world

A gleaming monument to the ambition and creativity of its age, the world's largest Victorian glasshouse will once again welcome visitors to see some of the world's rarest plants following a lengthy facelift.

"Temperate House" in London's Kew Gardens is large enough to house three jumbo jets, and was home to around 1,000 species of [plants](#) from around the world before it was shut in 2013 after falling into a state of disrepair.

"There was rust everywhere, all the paint was falling off, and look now, it's all brand spanking new," project manager Andrew Williams told AFP, as a fleet of diggers and teams of workers put the finishing touches to the £41 million (\$57 million, 46 million euros) renovation project.

The wrought iron and glass structure was designed by esteemed Victorian architect Decimus Burton in 1860 and opened in 1863.

The facelift required the removal of 69,000 individual elements to be cleaned, repaired or replaced and the restoration of 15,000 panes of glass.

Enough paint to cover four football pitches was used to spruce up the huge iron columns, and Kew expects hundreds of thousands of visitors to pass through its doors annually after its May reopening.

"A building like this deserves it," said Williams.

"I don't think you'd build a building like this now," he added.

"I had a love-hate relationship. You end up loving it at the beginning (of the project), then hating it in the middle and loving it at the end. It's hard work.

"Everybody who has worked in here is really proud and now you see the plants going in, it's a fantastic space."

With weeks to go before the grand reopening, horticulturalists are hard

at work rehousing the plants, many of which were transferred to on-site nurseries during the renovation work.

'Bit of an ordeal'

"It's been a really huge operation," Temperate House supervisor Scott Taylor said.

"In 2012 we started lifting and propagating plants to be moved out of the house, that took us until 2014 when the construction work began.

"It's going to take us about nine months to get all the plants back in."



Work progresses inside the Temperate House during the final months of a five-

year restoration project

Around 1,300 m³ of soil was brought in from off site, which will support around 1,500 species when the replant is complete.

The house will be split into geographical areas, showcasing plants from Africa, the Americas, Australia, the Himalayas and Asia.

"Our main drive for the reopening is rare and threatened flora," explained Taylor, shortly before heading off to plant an Australian palm.

"You don't go pick them up from the shop, it's a bit of an ordeal.

"We're really lucky we've got the Millenium Seed Bank 20 miles down the road. I've been on the phone to them, emailing them and getting all these plants.

"We've got about 50 species that are rare and threatened," he explained, including plants that no longer occur in the natural world.

One of the rarest plants on display will be the South African *Encephalartos woodii*, a palm-like cycad with leathery, green leaves.

Only one such specimen was ever found growing in the wild, and it has long-since disappeared from the [natural world](#).

Signs will inform visitors about the threats to flora, including changing land use, invasive plants brought in from different ecosystems and deforestation.

New ventilation and an upgraded heating system, largely fired by nearby

bio-mass boilers, have both been installed to help the plants flourish, although some treasured specimens were unable to make the move.

"We had a big Jubaea (palm) that was 160 years old," said Taylor.

"We discussed for a long, long time about what we could do, but it was going to burst through the glass," he explained.

"There's no way a plant that had been growing inside for 160 years would have been able to be moved outside. So sadly we lost a real big individual specimen."

With a new maintenance plan in place, Kew expects to go 25 years before having to carry out any more major work. The Grade I listed structure still benefits from its robust Victorian engineering.

"The key columns, the key structure is all original and we haven't had to do a lot of work to it," said Williams.

"They'll last for another 100 years. It's a big solid building, it's not going anywhere!"

© 2018 AFP

Citation: Giant London glasshouse to reopen with world's rarest plants (2018, February 14) retrieved 24 April 2024 from

<https://phys.org/news/2018-02-giant-london-glasshouse-reopen-world.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.