

In a hidden corner of an urban park in Scotland is one of the last and best remnants of an ancient pteridophyte forest. Fossil Grove, in Glasgow's Victoria Park, is a cluster of 300-million-year-old Carboniferous tree stumps uncovered by excavations in the late 1800s and shortly thereafter protected *in situ* by a small building. Strictly speaking, the fossils are casts of the trunk bases and roots of *Lepidodendron* scale trees, often referred to as 'tree horsetails' although their nearest living relatives are the scale ferns (*Selaginella*) and quillworts.

Fossil Grove is one of the oldest and best-preserved fossil forests in the world, and as such is legally protected as a Site of Special Scientific Interest. Its discovery in 1887, during landscaping of an old roadstone quarry in the newly-established Victoria Park, excited great interest at the time. The swift decision to conserve it within a new building plausibly owes much to the peculiar but wholly understandable enthusiasm for all things fern-related that swept Victorian Britain (and North America to some extent) during the mid-to-late 19<sup>th</sup> century – the famous *pteridomania* or fern-fever.

Glasgow was arguably at the epicentre of global pteridomania at that time, being the main urban centre on the western seaboard of Scotland where the mild, wet climate is especially fern-friendly and where so many of our horticultural 'monstrosities' were first discovered in the wild. The 1880s also saw the creation of a tree fern collection in Glasgow's magnificent Kibble Palace greenhouse, a few miles up the road from Fossil Grove. (Following complete restoration in 2006, the Kibble Palace remains one of the city's glories, and now houses the National Collection of tree ferns.)

At Fossil Grove, concerns over the condition of the protective building have motivated recent efforts by public agencies and the dedicated Fossil Grove Trust to undertake repairs and enhancements that will improve the care of the fossils. A future vision for the site is likely to include the design of a new building better geared to conserving and showcasing this natural wonder.

In the meantime, the site's pteridophyte interest is no longer confined within four walls as petrified stumps of long-dead trees. In 2017 local community group the Friends of Victoria Park (hereafter 'the Friends'), led by Richard East, came up with a vision to complement the Fossil Grove by creating an outdoor fernery in the former quarry located immediately behind the building.

The Victorians artfully landscaped this quarry to create an area of intimate crags and rock passages that would provide a fashionably picturesque setting for the Fossil Grove. However, what was once a well-tended and horticulturally pleasing area of landscaping has in recent years become decidedly unkempt for want of resources and manpower. The Friends' mission has been to return it to its former glory, and indeed to make it better than ever, by filling it with ferns!

Richard contacted the British Pteridological Society at an early stage to get advice on species choice and help with planning and planting. Through a series of community events the site was cleared of unwanted vegetation, soils improved, a pond restored, and an initial planting event in June 2019 saw over 600 hardy ferns and horsetails given a new home. BPS members donated many ferns but for a project of this scale most had to be purchased from commercial nurseries. As ferns are not cheap, the Friends have been most grateful for

additional funding from Glasgow's Incorporation of Gardeners, and the Glasgow West Area Partnership, a City Council fund.

Inevitably, a project of this sort in a popular urban park presents certain challenges: some ferns from the first round of planting were lost to vandalism or under the feet or wheels of pedestrians and cyclists for whom paths are a needless restriction. On top of that, Glasgow's fern-friendly climate exceeded itself in early 2020, with a long spell of very wet weather flooding part of the site and forcing visitors to divert through planted beds.

Despite the further challenges presented by the coronavirus lockdown, the group has been able to continue work over summer 2020, with socially-distanced volunteers comprehensively weeding the site in June and completing a second major planting event in July, with an additional 550 ferns brought in to fill remaining gaps. Another 400 ferns are due to be planted in late August 2020. Further supplementary planting will likely be required for a few years yet, after which the ferns should be well established and need less intensive care.

As the project comes to fruition (sporulation?) the Friends plan to publicise it with a website and leaflet explaining the vision and recording the species layout. In the long term, we hope the outdoor fernery will provide a beautiful living counterpoint to the ancient pteridophyte marvel of Fossil Grove, and so help to spread an appreciation of Glasgow's wonderfully fern-laced heritage.