



**NatSCA**

Natural Sciences Collections Association

<http://www.natsca.org>

## Biology Curators Group Newsletter

---

Title: Plants in a Gallery

Author(s): Riley, T.

Source: Riley, T. (1978). Plants in a Gallery. *Biology Curators Group Newsletter, Vol 1 No 10, 21 - 24.*

URL: <http://www.natsca.org/article/1603>

---

NatSCA supports open access publication as part of its mission is to promote and support natural science collections. NatSCA uses the Creative Commons Attribution License (CCAL) <http://creativecommons.org/licenses/by/2.5/> for all works we publish. Under CCAL authors retain ownership of the copyright for their article, but authors allow anyone to download, reuse, reprint, modify, distribute, and/or copy articles in NatSCA publications, so long as the original authors and source are cited.

archaeological digs etc.etc. and a 'reserve' collection is a useful teaching tool, ever-popular with young naturalists. Some of the remains served as voucher specimens for 'rarer' members of the Sheffield fauna (Water Shrews, once considered to be uncommon around Sheffield are now known to be much more widespread using results from the 'bottling' project).

Finally, the whole subject lends itself well to a bizarre and entertaining, if not entirely conventional gallery display. Under the heading "Bottle Killers", skulls, whole mammals and invertebrates displayed in a realistic setting has proved to be popular with museum visitors, particularly school-children.

### References

- Lee J. (1977) Some Beetle Species found in Discarded Bottles  
Sorby Record No. 15 p.30-36
- Morris, P. A. and Harper, J. F. (1965) The occurrence of small mammals in discarded bottles. Proc. Zool. Soc. Lond. 145 p.148-153
- Whiteley D. (1978) Small Mammals in Discarded Litter in the Sheffield Area. Sorby Record No. 16 p.44-49.

Derek Whiteley  
Sheffield Museums

- - - - -

### PLANTS IN A GALLERY

#### INTRODUCTION

Sheffield City Museums opened a newly-designed gallery in October 1976, devoted to the geological evolution of the planet Earth and of life. We had decided at an early stage to incorporate growing plants in the gallery, both for decorative effect and for comparison with fossil material. Our consultant designer for the project, Roger Simpson of Tideswell, accommodated this basic idea, and his design provided us with a plant trough 4.35 x 1.35 x 0.40 metres deep. It was sited immediately behind a low desk-case to house fossil plants, on a platform giving visibility from most parts of the gallery. The trough was lined with impervious, welded PVC sheet, particularly necessary as a small office is immediately below.

We had also decided that the plants would be un-enclosed for visual impact, which meant that they would have to tolerate room temperatures and low relative humidity. These factors have governed our choice of plants, as did our requirement for mainly evergreen species to give continuous display, and to minimize fallen leaves. Daylight reaches the plants through louvres from skylights situated above.

## CULTIVATION

Most plants are grown in John Innes potting compost with the addition of sand or peat to suit particular requirements. Larger plants are potted in individual plastic pots, and smaller plants are grouped in plastic troughs. Both are plunged into Vermiculite, a moisture retentive material to absorb surplus water, and to generate a slightly moister micro-climate around the plants.

Watering and foliage spraying is usually done twice weekly, otherwise maintenance is limited to the removal of dying leaves, and to the occasional replacement of a plant. Insect pests have been few, although some ferns and cycads have been attacked by scale insects, no doubt encouraged by the dry atmosphere. In another, isolated instance a Royal Fern was rapidly devoured by moth larvae before the culprits, Bright-line Brown-eye, were discovered.

Vandalism has been a relatively slight but niggling problem bearing in mind the easy accessibility of the plants. On several occasions Vermiculite has been thrown generously around the gallery, and has proved awkward to remove from a carpeted floor. A low Perspex barrier is now being constructed for emplacement between public and plants to inhibit repetition. Recently however vandalism has taken a more subtle turn, marked by the sudden appearance of bean shoots in our plant pots. We are now on the look-out for a green-fingered Chinaman.

## THE PLANTS

We have grown a wide variety of plants, to represent as far as possible the principal living groups, and to compare with particular fossil specimens such as cycads and Gingko. Below I have listed the majority of the kinds we have grown, with some indication of their success or failure in the gallery environment. Together they demonstrate the wide variety of plant groups, which with minimal maintenance can be grown in the generally unfavourable climatic conditions of the average museum gallery.

## FUNGI

Penicillium and other moulds grown on stale bread are very effective for a few weeks before requiring replacement. Place on pot of moist peat.

## LICHENS

Xanthoria on rock substrate appears to last indefinitely.

## PSILOPHYTE

Psilotum nodum grows well.

## FERNS

Generally not very successful - several failures include Asplenium nidus-avis, Didymochleana luneata, Lomaria gibba and Osmunda regalis. Relative successes include the tree fern Dicksonia antarctica, Microlepia speluncae, Pellaea rotundifolia, Platycterium sp. and Pteris umbrosa.

## HORSETAILS

Several British horsetails have proved quite intractable, while the exotic Equisetum ramosissimum lasted only a month or two, but with more careful cultivation might do better. The dwarf Equisetum scirpiodes survives and grows slowly, however it is not a showy plant.

## LYCOPODS

Selaginella kraussiana grows well in moist compost. S. cavlescens and helvetica have been less successful. After much searching we have recently acquired a Lycopodium (L. phyllanthum), which grows nicely in the humid atmosphere of a polythene bag, but which we are propagating before risking in the open gallery.

## CYCADS

Cycas revoluta looks well, but has made no new growth for two years. Alternating plants between gallery and greenhouse might overcome this. Encephalartos villosus produces new fronds but has been prone to scale insects.

## Ephedra

Suprisingly the xerphytic Ephedra gerardiana has so far failed, possibly because the plants were not well-established in pots.

## Ginkgo

Ginkgo grows quite well, although there is a marked tendency for the dormant Winter buds to set hard and not open. Frequent spraying to some extent counteracts this.

## CONIFERS

Aravcaria excelsa succeeds, as befits a popular house-plant. The other conifers tried, Athrotaxis cupressoides and Cryptomeria japonica have twice failed.

## Spermatophytes

Various palms form the structural backbone of the plant display, although large specimens for immediate effect were rather difficult to find. Howea

belmoreana, Trachycarpus fortunei, Seaforthia elegans and Cocos weddelliana all make good growth.

Tim Riley  
Sheffield City Museums

