

Bobart the Younger's Dried Garden

Dr Stephen Harris



William Sherard



John Ray



Charles Daubeny

As every gardener knows, the problem with growing unusual plants is keeping them alive. In the mid-17th century, unusual plants (mostly as seed) were arriving in the European gardens, including the nascent Botanic Garden in Oxford, from Africa, Asia and the New World but there was little knowledge about how to grow them. The Bobarts, father and son, tried to germinate and propagate these new curiosities. They had their successes and their failures. Some of their successes were recorded in the two Catalogues of the Botanic Garden that were published in 1648 and 1658. Unusually, we also know something of their failures, as these were not converted to compost but became part of the Bobarts' collections of dried plants or herbaria; which are with us today.

Jacob Bobart the Younger (1640-1719) was a son of Jacob Bobart the Elder (1599-1680), succeeded his father as *Hortus Praefectus* of the Oxford Botanic Garden, and remained in charge almost until his death. *Bobart the Younger* was evidently a precocious botanist, as he received special mention for his contribution to the 1658 Catalogue. Like his father, *Bobart the Younger* was a skilful plantsman, developed the Garden, exchanged plants with a wide range of the botanical elite of the late-17th and early-18th centuries, for example, *William Sherard* (1659-1728), *Hans Sloane* (1660-1753) and *John Ray* (1627-1705), whilst his plants populated the great gardens of the day, for example, he attracted the envious attention of the *Duchess of Beaufort* (1630-1714). Furthermore, in 1699, he completed the



Title page from the 1648 catalogue



Bobart the Younger

third part of *Robert Morison's* (1620-1683) *Plantarum Historiae Universalis Oxoniensis*.

The technology that Bobart employed to prepare his dried specimens is unlikely to be much different to that used today.

Essentially a plant is arranged on a piece of paper, covered with absorbent paper and pressed under a weight until dried. The dried plant is then mounted on paper, labelled and becomes a herbarium specimen. Originally, a collection of herbarium specimens was called a *Hortus Siccus* (literally 'dried garden'). The technology is simple but the scientific impacts are profound. When Bobart made his collection, herbaria were small, private affairs. Today, herbaria are often large, public institutions. However, the objectives are the same; to provide a permanent record of the occurrence of plants in time and space, and enable the correct application of a plant name, which is essential for biodiversity-based research. Kept dry and

free from fungi and insects, herbaria will be preserved indefinitely. Indeed, benign neglect has often been a strategy for managing herbaria.

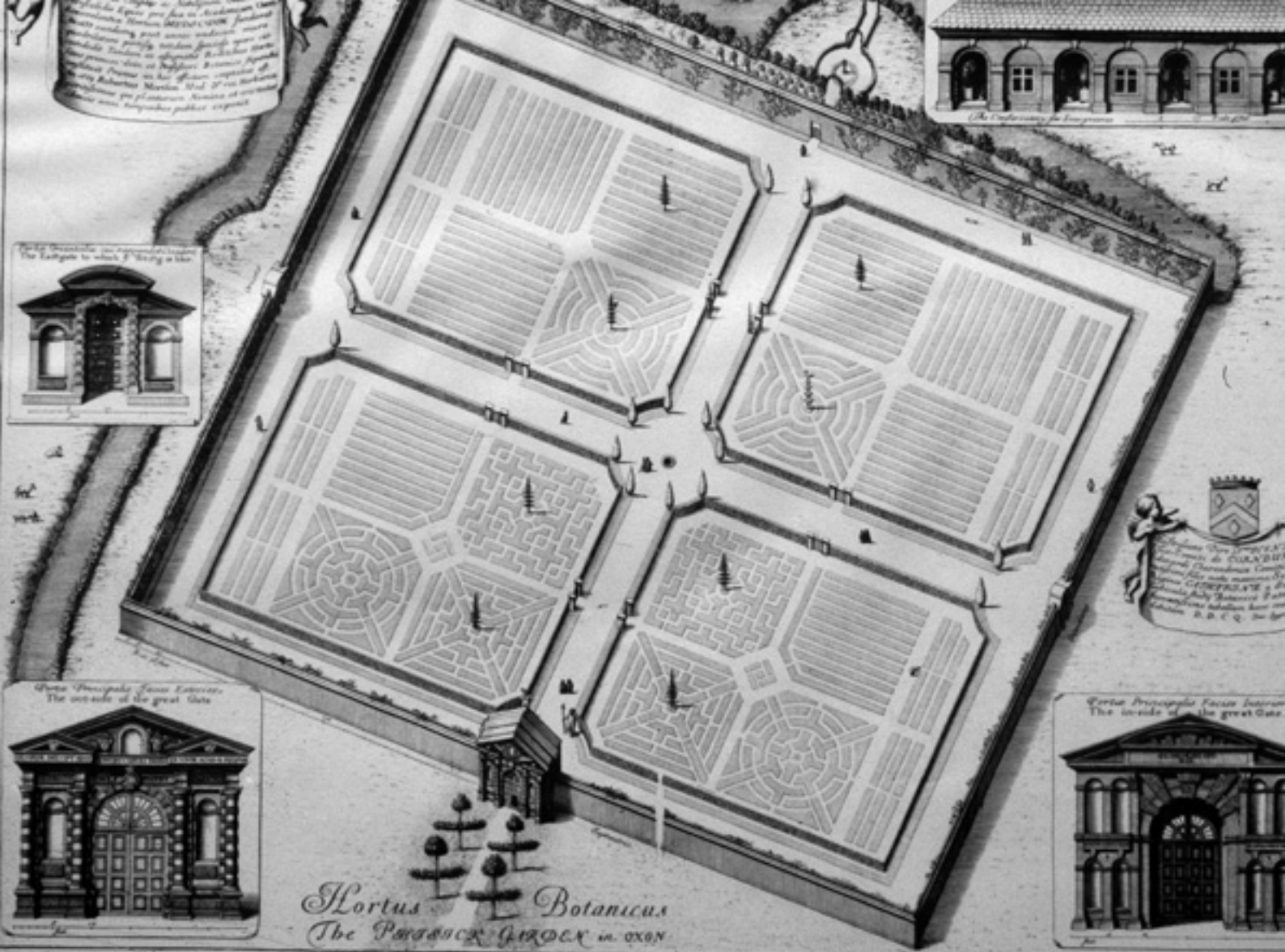
Bobart the Younger evidently saw the values of both living and dried gardens; values that were forcefully made by *Professor Charles Daubeny* in 1853 when he emphasised the partnership of living and dead plants in botanical research and teaching. This partnership continues to the present day. Yet the arguments were not new. Evans in his prose poem *Vertumnus* (1713), written to praise *Bobart the Younger*, makes similar points rather more verbosely:

'Their Barks, or Roots,
their Flow'rs, or Leaves,
Thy *HORTUS SICCUS* still receives:
In Tomes twice Ten, that Work immense!
By Thee compil'd at vast Expence;
With utmost Diligence amass'd,
And shall as many Ages last'

Indeed, this is the first mention of Bobart the Younger's herbarium. The most complete reference is found in a list of the books in Bobart's library, where two items are mentioned; a *Hortus Siccus* of 38 volumes and mixed *Horti Sicci* of eight volumes. All histories of the Botanic Garden in Oxford make reference to the herbarium of Bobart the Younger as comprising two collections; the collections associated with the publication of *Morison's Plantarum Historiae Universalis Oxoniensis*, known as the *Morisonian Herbarium*, and the more poorly known '*Bobart's Hortus Siccus*'. It is the latter collection that is of interest here.

Bobart's Hortus Siccus comprises specimens mounted on paper, each specimen labelled with a Latin phrase name and a common name. Originally, the sheets were bound together like books, and stored in the Botanic Garden. Today, the *Hortus Siccus* is part of Oxford University Herbaria, Department of Plant Sciences, and is stored as separate sheets in 16 boxes, although when the bound volumes were cut-up is unclear. There are indices at the start of some of the volumes, which *George Claridge Druce* (1850-1932) used to suggest that the sheets were originally bound as 14 volumes. However, the indices are written on paper from George III's reign, long after Bobart the Younger had died. The majority of labels are in Bobart the Younger's hand, and all the specimens are undated and collection sites are not given. The dating of the *Hortus Siccus* is difficult, although it is likely to have been created early in Bobart the Younger's career. Previous commentators on the *Hortus Siccus* have placed considerable weight on a manuscript note, dated 24th November 1666, pinned into one of Bobart's notebooks preserved in the Plant Sciences Library, although there is no indication in Bobart's notes to what this date refers. Additional complications arise over where the material was collected. It is likely that the majority was from material growing in the Botanic Garden and around Oxfordshire, although some specimens evidently were not, for example, the marine alga that Bobart refers to as '*Fucus sive Alga latifolia major dentata*' and is better known today as *Fucus serratus*.

It should not be imagined that the *Hortus Siccus* is the mere 'refuse of nature', a record of horticultural failure. Many of the plants that it contains were evidently successfully grown by the Bobarts. As with the two Catalogues, the contents of the



The Botanic Garden in 1675 showing the symmetry

Hortus Siccus reveal that the Oxford Botanic Garden was not just a collection of medicinal plants. The *Hortus Siccus* is rich in the fashionable ornamentals of the day, e.g. narcissus, hyacinth and myrtle, and foods and spices, e.g. cabbages, coriander and caraway. In addition, numerous developmental, colour mutations and variegated forms are represented, e.g. double anemones and wallflowers, which were starting to attract scientific interest. No doubt curiosities such as '*Ficus Indica minor*', the *Opuntia* cactus, or '*Limonio congener Virginensis longiore folio*', a species of North American Sarracenia, were popular with visitors. Among the apparent horticultural failures one can find specimens represented by single, poorly prepared leaves, such as

'*Staphis agria*' (*Delphinium staphisagria*) or '*Hedera trifolia erecta Virginiana*'. Looking through the *Hortus Siccus* one is struck by what an exciting place the Garden must have been, and the degree of care that the Bobarts devoted to his charges – whether fresh or dried.

The importance of Bobart's *Hortus Siccus* is three-fold; it provides a snapshot of a botanical collection made during an exciting period of Early Modern botanical investigation; provides a means of verifying the identities of the names used in the 1648 and 1658 Catalogues; and illustrates the range of plants that the Bobarts were cultivating or attempting to cultivate in the early-to late-17th century. Furthermore, the *Hortus Siccus* reveals some splendid common

names (e.g. '*Bastard Bramble of Virginia*', '*Frogs Lettice*', '*Lancashire Asphodel*' and '*Unpleasant Bawme*') and is a collection that Druce credits with containing some of the first Oxfordshire records of native British plants.

Having been 'hidden' in the Oxford University Herbaria for over three centuries, a complete catalogue of Bobart's *Hortus Siccus*, together with images of all of the sheets, is now available using the links on either the Oxford University Herbaria website (herbaria.plants.ox.ac.uk) or the Botanic Garden website (www.botanic-garden.ox.ac.uk).

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