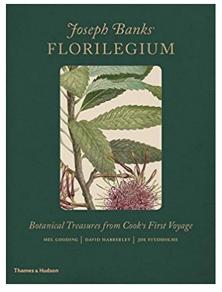
## **Book Review**

## Joseph Banks' Florilegium: **Botanical treasures from Cook's** first voyage

With texts by Mel Gooding, commentaries on the plates by David Mabberley and an afterword by Joe Studholme Published by Thames & Hudson, London, 2017 Hardcover, 175+ illustrations in colour and black and white, 320 pages, 272 × 363 mm ISBN 978-0500519363 \$NZ135.00 Reviewed by Dr A.R. Ferguson



In 18th century Britain the Grand Tour of the antiquities of Europe was considered an important part of the education of wealthy, aristocratic young men. Joseph Banks was young, he came from a prominent landowning family and he was seriously wealthy. His Grand Tour was, however, rather different to those of his contemporaries. After a relatively short trip to Newfoundland and Labrador he decided "... my Grand Tour shall be one round the whole globe." He joined the first voyage by Captain Cook on the bark Endeavour to the southern oceans. This allowed Banks to indulge in two of his passions: women (Fara, 2003) and plants. Since boyhood, Banks had had a fascination for natural history, especially plants, and he had even personally funded a lecturer to give a course in botany when he was at Oxford University. On the voyage, Banks was accompanied by Dr Daniel Solander, a botanist

working at the British Museum, Herman Spöring who acted as his personal secretary, the artists Sydney Parkinson and Alexander Buchan, and four servants (and a goat to provide fresh milk for the gentlemen).

It must have been exhilarating for the botanists to find so many new, novel plants. After nearly three years the Endeavour returned to England with a vast collection of seeds, 30,000 dried herbarium specimens, shells and zoological specimens. The plants alone increased the known flora of the world by about a quarter: they were found to belong to 110 new genera and 1,300 new species at a time when Linnaeus had listed only 1,098 genera and about 5,900 species (Stearn, 1977).

Banks planned a magnificent series of 14 folio volumes to document the scientific findings of the Endeavour voyage. One such volume was to be Primitiæ floræ Novæ Zelandiæ (Beginnings of a New Zealand flora), an account of the plants collected in New Zealand, mainly from the coastal regions which could easily be explored by short excursions from the Endeavour. Solander prepared detailed but elegant descriptions on 349 of the New Zealand species and the illustrations were to be based on the work of the botanical artist Sydney Parkinson.

The young Scot, Sydney Parkinson, aged only 23 had been employed to accompany Banks and Solander on the *Endeavour* voyage to record the specimens collected, not only plants but animals as well (Carr, 1983). This was no easy task as working conditions were poor, the crowded cabin was filled with specimens and equipment and the Endeavour was small and rolled heavily. Although Parkinson was industrious and worked long hours, he was soon overwhelmed by the numbers of new plants collected. He prepared more than 950 sketches of plants, made meticulous notes of their colour while still fresh and then prepared full coloured illustrations. Less than a third of the full illustrations were completed before he died after the Endeavour left Batavia (a city now known as Jakarta) on the trip home

and those illustrations that he did manage to complete were mainly of plants from Madeira, Brazil, Terra del Fuego and Tahiti with a few from New Zealand. On returning to London Banks arranged for artists to finish illustrations based on Parkinson's sketches and notes, the herbarium specimens and the descriptions by Banks and Solander. Then a team of engravers completed at huge cost 743 copper plates to illustrate the proposed floras. At one stage, Banks considered that only several months were required to complete the works for publication but progress stalled and on Banks' death in 1822 the engraved plates (more than a ton of copper) and Solander's unpublished diagnoses were bequeathed to the British Museum (Natural History).

Publication of Primitiæ floræ Novæ Zelandiæ would have been a magnificent start to the scientific study of the New Zealand flora. Instead, it was a sadly missed opportunity, an only too common feature of many of the early voyages to the Pacific. Stearn (1977) quotes P.J. Whitehead, "... there is indeed a lamentable contrast between the determination, courage, good planning and great care that attended the collection of all this material, and the series of delays, misfortunes, dissensions, intrigues (and at times downright malice) that so beset the publication of the journals as well as of the scientific results."

Solander's descriptions and many of the names he gave were taken up by other authorities such as the Forsters (Hatch, 1963). His plant descriptions, models of terseness vet comprehensive, proved to be very useful in the preparation of Thomas Kirk's The students' flora of New Zealand and the outlying islands (1899). Sets of proofs of the engravings from the copper plates showing the New Zealand plants were sent to Wellington (Adams, 1988; Brownsey, 2012) and the intention was that an accompanying volume of reduced copies of the prints would be published. The project was abandoned after the death of Kirk.

Most of the Australian plates, 318 of the total, were reproduced lithographically in James Britten's Illustrations of the botany of Captain Cook's voyage around the world in H.M.S. Endeavour in 1768–71. 1. Australian plants published in three parts between 1901 and 1905. The plates are rather pale and disappointing.

Much finer was the printing in black ink of 30 of the original copper plates in Captain Cook's Florilegium: A selection of engravings from the drawings of plants collected by Joseph Banks and Daniel Solander on Captain Cook's first voyage to the islands of the Pacific (1973). Eight of the plates were of New Zealand plants, including Sophora tetraptera, Metrosideros excelsa, Solanum aviculare and Collospermum hastatum. The images are clear, crisp and strong and, to me, benefit from the lack of colour. I believe that these are the finest prints ever made from the Banks copper plates. The plates are accompanied by essays by Wilfrid Blunt and William Stearn and the original Latin diagnoses of Solander. The main drawback to this edition, magnificently luxurious in design and typography, is that it was limited to 100 copies and is therefore very expensive and available only in a few institutions.

It is not known whether Banks intended to publish the engravings in black and white or in colour. The first (and only) edition in colour was by Alecto Historical Editions in association with the British Museum (Natural History) (Adams, 1986). With much effort, the copper plates were cleaned, restored and protected by a thin coating of chromium. The colours were then applied to the plates à la poupée, i.e., by a rolled-up piece of cloth. Inking of the plate with up to ten different colours, printing and cleaning of the plate could take up to three hours for a single impression. The colours were checked against the original watercolours and fine botanical details were added by hand. Although the edition was limited to 100 numbered copies plus 16 additional copies, with 743 plates to be printed, this meant the preparation of more than 86,000 individual impressions to the exacting standards of the master printer, Edward Egerton-Williams. Understandably, printing took a

decade from 1980 to 1990. Most sets were taken up by institutions but a few sets have been broken up and individual plates are often available – at a price. A complete set of the 183 New Zealand plates recently sold at auction in Auckland for a bargain \$26,000.

Now at a relatively affordable price comes the Joseph Banks' Florilegium based on a copy of the Banks Florilegium held at the Natural History Museum. It contains 147 plates, just under one fifth of the total; 38 plates are of New Zealand plants, likewise about one-fifth of the original 183. The plates are reproduced at 75% of the original size (when the plants were life-size). This has resulted in occasional minor loss of detail in the subsidiary diagrams of floral structure at the bottom of some plates. The plates are reproduced on a heavy, rich creamy paper, very similar to that used in the Alecto edition of Banks' Florilegium. I have been able to compare directly the colours of one plate in the two florilegia, that of Scandia rosifolia. The stalks and the leaves are definitely a sharper green in the Alecto Banks' Florilegium and the purple of the inflorescence slightly darker and more pronounced. If this difference in colour is consistent then it is probably an advantage. Brownsey (2012) pointed out that in the Alecto Banks' Florilegium there was "a preponderance of blue- and bright greens compared to the brownand bronze-greens typical of the New Zealand bush." Although the colours of the pigments used in printing were checked by the late Chris Humphries against the original watercolours, colours may have altered in the intervening two centuries. Overall, the reproductions in the Joseph Banks' Florilegium give a reliable and trustworthy indication of the qualities of the plates in the Alecto edition of the Banks' Florilegium. Possibly the choice of the plates used is a little misleading: those chosen tend to be of the larger, more spectacular plants rather than the more insignificant, scrawny little plants of limited appeal to other than botanists.

Joseph Banks' Florilegium demonstrates the qualities of Sydney Parkinson as a botanical artist. He was careful and accurate and this would have appealed to Banks. Joseph Farington, the English

landscape painter recorded in his diary, "Accuracy of drawing seems to be a principal recommendation to Sir Joseph [Banks]". Parkinson's approach was ideal for the scientific purposes for which the illustrations were being prepared. Just fewer than 30% of the plates in the Banks' Florilegium were based on Parkinson's completed drawings. His drawing of Bougainvillea spectabilis is illustrated by Magee (2009): it was reproduced in the Banks' Florilegium as the exact mirror image. The remaining Banks' Florilegium plates are based on the preliminary sketches of Parkinson completed in the same style by other artists (Sampson, 1985). Magee (2009) illustrates the process with the example of the red passion flower, Passiflora aurantia: the sketch by Parkinson and the completed watercolour by Frederick Nodder used to prepare the engraved plate. Parkinson's achievements are remarkable since he was only in his mid-twenties when he died and his botanical works are only part of his output.

There is, however, a whiff of the herbarium about many of the plates. This is not surprising. The plant samples painted by Parkinson would often have been those collected for the herbarium. The artists who completed Parkinson's sketches often studied the dried herbarium specimens. Furthermore, Parkinson was not as accomplished an artist as the two giants of the time, Ehret and Redouté (Blunt and Stearn, 1994). None of the plates based on Parkinson's work have the brilliance or the élan of, for example, Ehret's marvellous Lilium superbum. In addition, the engravings have been disparaged by Blunt as "disagreeably mechanical". Certainly, they lack the subtle beauty of other engravings of the time, for example, Le Grand's fantastic engravings of van Spaendonck's flower paintings. However, there is no doubt as to the importance of Parkinson's illustrations and the completed engravings as a botanical record of Cook's great voyage.

Joseph Banks' Florilegium is a delight, a masterpiece of design and printing. It is the most handsome of recently published books that I can remember. The essays by Mel Gooding are short but give a good