George Caley – Robert Brown's collecting partner

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George Caley (1770–1829) collected plant specimens for Joseph Banks in the colony of New South Wales from 1800 to 1810. This paper outlines Caley's contacts with Robert Brown in New South Wales in 1802 and subsequent years; his contacts with Brown back in England; their collecting forays in the colony, and Brown's respect for Caley's ability and botanical knowledge.

George Caley (1770–1829) collected plant specimens for Joseph Banks in the colony of New South Wales from 1800 to 1810. His altercations with Governor King and the Rev. Samuel Marsden, and his reputation as an irascible character have coloured the historical record so that his botanical contribution has often been minimised (Webb 1995). But Robert Brown saw evidence of Caley's ability during their contacts in the colony, and their friendship continued when Caley returned to England in October 1810. This paper is based on a poster displayed at the Robert Brown Conference in Sydney, in May 2002, and outlines George Caley's contacts with Robert Brown in New South Wales and subsequently in England.

George Caley and Robert Brown

The *Investigator* arrived in Sydney on 9 May 1802 (Vallance et al. 2001). As early as 18 June 1802, Robert Brown and the gardener Peter Good, and perhaps Ferdinand Bauer too, walked with Caley from Parramatta (Caley's base) to North Rocks, a distance of six or seven miles (10–11 km). Brown recorded in his diary, 'A few plants found ... Caley accompanied us ... his loquacity, his names of plants generic. Mostly bad Greek. However he is an observer and should be encouraged ... his collection not numerous but well preserved ... '.

The next day the party, including Caley, walked to Castle Hill and returned to dinner at Parramatta. They then went on to Windsor and across the Nepean into the mountains near the Grose River, 'its banks steep and rocky, but not perpendicular.' There is no record in Brown's diary of Caley being present on this later excursion.

The *Investigator* was in Sydney for twelve weeks, and left on 21 July to complete Matthew Flinders' survey of the coastline. The ship returned to Sydney in June 1803, the ship's hull so rotten that she could have foundered at any time. Flinders decided to return to England with his charts in the *Porpoise*, the only ship available. Brown selected the best of his specimens to return also, while he and Bauer elected to stay until the *Investigator* could be repaired.

Governor King was anxious to help, and wrote to Banks in September 1803, 'I have supplied Mr Brown with a very good apartment of boxes for the *Porpoise's* plant cabin ... Caley is very angry because he cannot get the same boxes ... I have given directions that some should be made for him. I believe he is very angry at having Mr Brown here, who he cannot help considering as a laborer in the field that ought to be wrought by himself. He has all he wants but is by no means satisfied.'

This animosity towards Caley may or may not have been justified, but King's comments are not supported by Caley's own words to Banks in a letter of 7 August 1803, 'I am glad that Mr Brown will remain some length of time here ... in some respects I flatter myself I may benefit him in showing him the most likely places to meet with new plants ... on the other hand, I know I shall be much benefitted by Mr Brown for in general, until the present, I have nobody to discourse upon the same pursuit, for want of which, the pleasures of the study were abstracted.'

On 19 October 1803, Caley took Brown to the Cow Pastures, an area to the south of Sydney near Camden that Caley had already explored; Brown collected a number of new specimens on their four-day excursion. At the end of November Brown left in the *Lady Nelson* to go to Tasmania for what was to become a protracted stay, longer than he had anticipated. He was not to return until August 1804.

On 14 September 1804, Brown walked to Parramatta; the many references to Caley's work for this day in Brown's diary indicate that the two men spent some time comparing specimens. Caley's animal collection was also examined. The next day was also spent with Caley, who showed Brown his orchid collection. Four days later they were both in Sydney to meet Colonel William Paterson who examined with interest Brown's collection from Port Dalrymple (George Town) and the River Derwent in Tasmania.

Caley gave a number of his choice specimens to Brown, always with a generic and specific name attached, but in his later publications, and in his processing of specimens for the herbarium, Brown did not always acknowledge Caley's contribution. Groves and Moore (1989) in their paper on Brown's collection in Australia refer to an herbarium sheet of the fern Adiantum hispidulum, supposedly gathered by Brown. Three old labels accompany the sheet, one indicating 'Port Jackson' with no date, the second 'North Rocks August 1802' and the third 'Dove Dale Feb. 1804.' Vallance (1990) points out that the first, of course, might be due to Brown, but the lack of date is no help. As to the other two, Brown was away with Flinders in August 1802, and in Tasmania in February 1804. Vallance concludes that the North Rocks and Dove Dale records are annexed from Caley. Another specimen, an orchid Pterostylis nutans (Caley's Druid's Cap Dicksoni) is attributed to Brown (Clements 1989), 'Port Jackson, North Rocks, Jul. 1804. R.Brown.' This is not possible, as Brown was in Tasmania at this time. These errors may not necessarily be a deliberate evasion by Brown, but the evidence seems conclusive that Brown published a number of Caley manuscript names without acknowledgement. Brown and Bauer, with their massive collection, left Sydney on 23 May 1805.

Brown developed a high regard for Caley's work and was the first botanist, after Banks and Dryander, to have the opportunity to examine Caley's plant specimens and use them for his publications. On 17 January 1809, Brown read a paper to the Linnean Society. In his closing remarks he said, 'Besides the Proteaceae described or noticed in this paper, I am acquainted with several very beautiful species, chiefly of *Grevillea* and *Persoonia*, discovered in New Holland by Mr George Caley, a most assiduous and accurate botanist, who, under the patronage of Sir Joseph Banks, has for upwards of eight years being engaged in examining the plants of New South Wales, and whose numerous discoveries will, it is hoped, be soon given to the public, either by himself, or in such manner as to obtain for him that reputation among botanists to which he is well entitled.'

In Brown's *Prodromus* of 1810, p. 329, he wrote in his dedication of the orchid genus *Caleana*, in Latin, '*Genus pulchrum et valde distinctum dixi in honorem Georgii Caley*, *botanici periti et accurati* ... ' in honour of George Caley, a skilful and accurate botanist.

Caley was well received by the botanical fraternity when he returned to England late in 1810, 'Mr Dickson called on me and I went with him to town — then to Sir Joseph's and afterwards to Mr Brown's.' (Caley's Diary, 1811). James Dickson was a leading cryptogamic (non-flowering plants) botanist with a successful herb and seed shop in Covent Garden. He was one of the founders of the Horticultural Society of London and the Linnean Society, and it is significant that he befriended Caley and continued to give him support during the years Caley remained in England.

In August 1811 Caley settled down in a rural area about 10 km north-east of Manchester, occupied with cleaning, sorting and naming his specimens. He continued to correspond with Brown and Banks. Brown visited Caley in Manchester in October 1815, Caley having written to Brown in July, 'If you can in any shape put up with a Botany Bay reception, I will endeavour to make you as comfortable as I can, and shall be glad of your company ... '.

After Caley's death in 1829, Brown (1830) published a paper on the Proteaceae, naming *Grevillea caleyi* R. Br., a plant, now rare, first found by Caley in 1805 near Belrose (a Sydney suburb not far from Narrabeen Lagoon). Caley wrote an account of this four-day journey, 'A Journey to the Sea', which took him from Captain Macarthur's farm at Pennant Hills (west of Sydney), through present day St Ives to Narrabeen Lagoon and the sea. He returned by the upper reaches of Middle Harbour (Caley 1805).

Caley and the eucalypts

It is fitting that the last word on Caley and Brown concerning the eucalypts, a major component of Sydney vegetation, should come from Dr L.A.S. Johnson, late Director of the Royal Botanic Gardens, Sydney. In 1988 Dr Johnson stated that he had gained an impression from examination of Caley's specimens and notes that he (Caley) knew much more about the Port Jackson eucalypts than anyone else for the next half century or more. Robert Brown did not study the eucalypts in depth; George Bentham struggled with them but was unable to do a really good job as he was not on the spot, as Caley had been. Perhaps Caley's greatest contribution to Australian botany is that he was the first to recognise hybridization in the genus *Eucalyptus*, which he did as early as 1810; later more eminent workers, such as the Rev. Dr William Woolls and the great Ferdinand von Mueller believed such did not, and could not, happen. Today it is well accepted that hybrids do commonly occur (L.A.S. Johnson pers. comm. 1988).

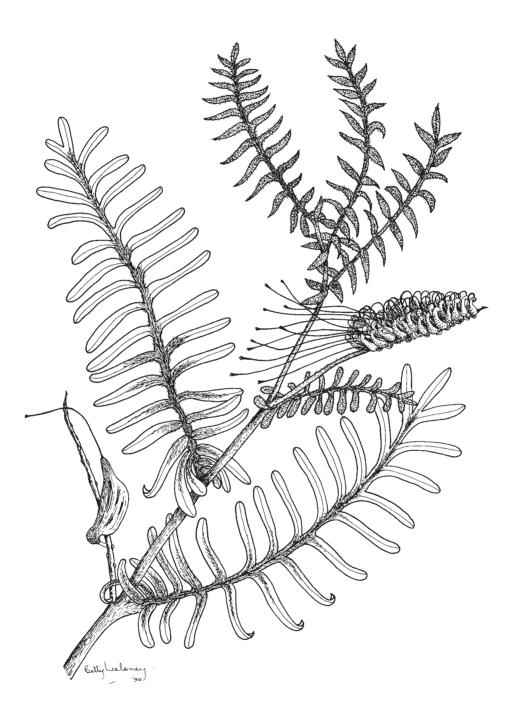


Fig. 1. *Grevillea caleyi* R.Br., collected by Caley near Belrose in 1805, and now listed as Endangered because of its very restricted geographic distribution.

Joseph H. Maiden, another Director of Sydney's Botanic Gardens said, in dedicating a New England Ironbark, *Eucalyptus caleyi*, to Caley's memory, 'The vernacular name, "Caley's Ironbark", is short; it commemorates a worthy pioneer botanist whose work requires much more emphasis than it has hitherto received.' (Maiden 1904–1924).

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