The introduction of *Araucaria araucana* into the British Isles

DAVID GEDYE¹, a great-great-grandson of Philip Frost (1804–1887), Dropmore's head gardener from 1832 until 1887, where an *Araucaria*² was planted in 1824, has reappraised the chronology of the monkey puzzle tree's introduction to Britain.

Much that is written about the introduction of the monkey puzzle tree into the British Isles is misleading. A plaque labelling an *Araucaria* in the grounds of Berkeley University, California, outlines the tree's introduction as: "A legend tells that when Captain Cook first saw the unusual Araucaria araucana during his voyages in the 1770s he said: "Why, that's enough to puzzle a Monkey", and it (the tree) was not allowed out of these countries (Brazil & Chile) until 1795 when a British visitor stole the protected seeds from his plate while dining with the Viceroy of Chile" (Dave, 2016). It was the Spanish who first described the tree in the 1780s (Ravenscroft, 1884). *Araucaria araucana* isn't a native tree of Brazil. There is no evidence the seed was not allowed out of Chile and its common name evolved from the remark "the tree would puzzle a monkey" made by Charles Austin during a visit to Pencarrow, Cornwall, in 1834 (T.G.C. 1899).

Whittle (1970) oversimplified and exaggerated Lobb's role in relation to the tree's introduction to England when he wrote: "In a province inhabited by the Araucanos Indians Lobb recognised a tree which had been first introduced to England by Menzies. As a gardener he judged that the tree could become immensely popular in Europe and that it was worth sending quantities of kernels back to England. He also changed its name, or rather named the genus Araucaria after the Indians whose hospitality he had enjoyed and who used the kernels as a fruit or ground into a meal." De Jussieu named the genus Araucaria in 1789 (Wikipedia) and Lobb did not make a judgement about the tree; Veitch instructed him to go to Chile to collect seed.

As the Veitch nursery grew in stature they played up the role of their plant hunter, William Lobb, when they wrote: "Araucaria continued to be very scarce in England; seed could not be obtained, and the small quantity that reached the country from time to time failed to germinate. It was not until 1844 (sic) when Lobb... brought home the first large supply of seed and from which very many of the fine specimens now growing originated" (Veitch, 1881). Shephard (2003) wrote: "They (the Veitch nursery) gave us some of our most loved conifers such as the Monkey Puzzle". Musgrave (1998) wrote: "As far as Veitch and Sons was concerned, this single,

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² For brevity any singular reference in the text to *Araucaria* refers only to *Araucaria araucana* (Molina) K Koch formerly *Araucaria imbricata* (commonly known as the monkey puzzle tree but also variously known as the Sir Joseph Banks'-pine or the Chile-pine) and not to any other *Araucaria* species.



Left, The trunk of R2 strikes its way proudly to the sky, but neglect and uncontrolled competition has reduced the crown to all but a few twigs.

Below, an 1840 planting plaque at the base of one of the 1840 planted Dropmore araucarias (Taken in 2014, I believe it was G9). In 1963 Mitchell identified 11 araucarias surviving at Dropmore. He recorded that G9, R2 and A23 had planting dates of 1840, with the majority of the other trees being planted in 1843.



early, reintroduction confirmed the policy of sending out plant hunters". Neither mentioned that there was a significant number of established trees around the British Isles before Lobb left for South America though Shephard briefly acknowledged the Horticultural Society's plant collector, James Macrae, when she referred to Veitch being influenced by trees he had seen at Kew grown from his seed.

When A. F. Mitchell (1963) carried out a detailed study of Lord and Lady Grenville's nineteenth-century pinetum established at Dropmore, he recorded 11 mature *Araucaria*. Three had planting dates of 1840 or earlier, six were planted out in 1843. In a subsequent report on the oldest and largest trees across the British Isles, Mitchell (1973) listed 83 significant *Araucaria* trees. Eleven trees (two from Dropmore and nine from other pineta) were planted before 1841. If Menzies brought back five trees in 1795 and it was then 1843 before further seedlings were available from Lobb's seed, where had these pre 1843 trees come from?

It is argued that less emphasis should be given to the role of the Veitch

nursery and William Lobb in relation to the tree's introduction, and greater credit given to the Horticultural Society and James Macrae and to enterprising nurserymen who sold seed and trees before Veitch. Credit must also go to the head gardeners of large estates who confirmed that the species could withstand British winters and tolerate a wide range of growing conditions. Between 1826 and 1842, their collective activity was reported on by John Claudius Loudon in *The Gardener's Magazine* and other publications. Influenced by what he had seen, heard and read, James Veitch already knew other nurserymen were selling seed and trees before he appointed Lobb to plant hunt in South America. He reasoned that cashing in on the tree's rising popularity was a way of ensuring a financial return on his nursery's first fully funded plant collector.

Archibald Menzies—facts or hearsay

In March 1795, HMS *Discovery*, captained by George Vancouver reached Valparaiso, Chile (Vancouver. 1801). Accompanied by four of his officers and the ship's botanist, Archibald Menzies, Vancouver went inland to Santiago where it is commonly claimed Menzies surreptitiously pocketed *Araucaria* seed served as desert during a meal with the Viceroy. Menzies (1795) confirmed he received excellent hospitality in Santiago but never mentioned being given pine nuts at a meal. Marks (1996) speculated that the story had been confused with another where Menzies, when in California, described being given small kidney bean sized nuts tasting of bitter almonds along with seedling trees that were landed in England and given to Kew. However:

- Lambert (1832) stated his drawings of male cones were from specimens "collected by Menzies in the neighbourhood of Concepción", a port Menzies never visited, but he had time to arrange for cones of both sexes to be shipped up from Concepción to Valparaiso.
- Loudon (1838) wrote: "In 1795, Captain Vancouver touched at the coast of Chili (sic); and Mr Menzies, who accompanied the expedition, procured cones, seed from which he sowed on board ship and brought home living plants". Known for ascertaining the accuracy of his facts, it is unlikely Loudon made up the reference. Loudon and Menzies were fellows of The Linnean Society and had a deep interest in botany. Loudon may well have obtained his information directly from Menzies. He also committed his version to print in 1838 while Menzies was still alive, and there is no evidence that Menzies, who lived until 1842, corrected him.
- Smith (1880) wrote: "At a dinner given by the Viceroy of Chili (sic) part of the dessert consisted of nuts. Instead of eating all his share Menzies took some with him and planted them". Smith started at Kew in 1822 and became Garden Curator in 1841. He is known to have met Menzies and may have heard the story directly from him or from Kew's director, Sir Joseph Hooker.

- Veitch (1881) wrote: "Menzies procured some cones and seeds, and also some young plants, which he succeeded in bringing home alive". Veitch knew Hooker and could have mentioned the seeds from the dinner table story, but chose only to write that Menzies collected cones, seed and plants.
- Ravenscroft (1884) repeated Loudon's 1838 version. A young man when Menzies died, it is unlikely Ravenscroft ever spoke with him. He knew Sir Joseph Hooker yet made no reference to 'seeds from the table'.
- Elwes and Henry (1906) wrote: "Sir Joseph Hooker (son of William Jackson Hooker) who knew Menzies personally, tells me he (Menzies) took the seeds from the desert table of the Governor". Elwes was born after Menzies death and got his story from Joseph Hooker who was 25 when Menzies died and nearly 90 when Elwes went to print.

Groves (2010) cited Elwes and Henry (1906), as his evidence that the seed from the table is the correct story, but how did the seed reach Santiago? In the eighteenth century, *Araucaria* trees were still confined to southern Chile. The most probable route would be by boat from Concepción to Valparaiso and then overland. James Macrae gathered cones and seed in the coastal town of Concepción, proving it wasn't necessary to go to the forests to gather seed (Macrae, J.) and Eduard Peoppig confirmed that seed was available in Valparaiso market where "they are offered for sale boiled and dried" (Hooker, W. J., 1835). Captains King and Fitzroy commented the cones were roasted before being sold (T.G.M., 1839, 1c) and Marianne North referred to *Araucaria* pine nuts being eaten cooked "like chestnuts" (Elwes, H. J. & Henry, A., 1906). It is more likely Menzies first saw *Araucaria* seed in Valparaiso before he travelled to Santiago where, if he was served them at a meal, there was every chance they were cooked, rather than raw.

The means by which Menzies obtained viable seed will always be open to speculation, though both versions can be correct. Knowledge of plants and their medicinal properties was an essential part of Menzies' profession and it would be unusual if, on coming across a strange edible seed, he had not pocketed a few, if only to show them to others to ask what they were, where they came from and how he could obtain fresh seed. If seed reached Valparaiso uncooked he could have picked some up that way, but he also had time to get fresh seed shipped up from Concepción. It is therefore arguable that a more accurate story may be that Menzies came across the seed in Valparaiso marketplace, or at a meal, pocketed a few to ask around about them and succeeded in obtaining fresh cones, or seed, from which he grew his trees which he landed with on 20 October 1795.

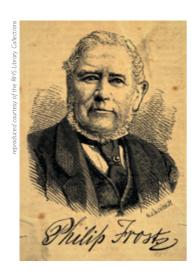
What became of Menzies's seedling trees?

Elwes and Henry (1906) stated that one tree was given to Sir Joseph Banks and



Watercolour painted in 1850 by William Richardson of the Dropmore Araucaria planted out in 1829/30. A. F. Mitchell records the tree was 2ft 6ins high when planted. This is most likely the Horticultural Society Macrae seedling sent to Dropmore in October 1826.

five to Kew, suggesting that six were landed. On its website, Kew states that Sir Joseph Banks retained two of Menzies' trees for his estate and gave three to Kew (Kew Gardens). The most commonly repeated story is that Menzies landed five seedlings of which one was retained by Sir Joseph Banks for his



The torn out etching of Philip Frost, another component of my inheritance. I subsequently established this etched image of Philip Frost was first published in *The Gardeners' Chronicle* in January 1875 as No.10 of 47, in a series the magazine ran on British Gardeners. The full article was reprinted as his obituary on 5th October 1887. It is not known which of these two articles my original picture came from.

estate at Spring Grove, Isleworth, and four went to Kew (Smith, 1880; T.G.C. 1892).

Smith (1880) reported that both Banks and Kew immediately planted out seedling trees but they died soon after planting. With the failure of these first two trees Kew kept their remaining saplings as tender glasshouse plants, though at least one of these did not have an easy life. Neill (1823)

wrote: "The most magnificent specimen of Chili (sic) Pine (Araucaria imbricata) at Kew gardens, was irretrievably injured by its presence at a single gala at Carlton-House, owing to the servants having very imprudently hung lanterns to the branches of the tree". It isn't clear when the gala occurred, but "irretrievably injured" suggests the tree died.

Kew Garden's superintendent, Mr McNab, eventually planted one of the glasshouse trees in the Kew garden in 1806/1808 (Loudon, J. C., 1838; Smith, J., 1880). Unsure of its winter hardiness, it was kept protected with a temporary frame and mats during the winter months. By 1892 it was described as: "One of these (Menzies' Araucarias) still exists there (at Kew) though a wreck and an eyesore to all but the sentimentalists" (T.G.C., 1892). Starting life as a pot-bound specimen had not done it any favours. In 1893 Kew announced its death; this was also published in the Daily Chronicle (Kew Bulletin, 1893; T.G.C., 1893).

The remaining two Kew araucarias were kept indoors in their planters until 1833 when: "One of these plants which had previously been kept in a greenhouse, was presented by King William IV to Lady Grenville for her collection at Dropmore. It was then about 5 feet high and growing in a tub. It is now (1880) a fine tree 60 feet high", (Smith, J., 1880; T.G.C., 1892). The Kew Goods Outwards Book lists numerous plants sent to Dropmore in 1833 but there is no record of the King's gift (Kew, 1836). The head gardener at Dropmore when the tree arrived was Philip Frost who had succeeded the previous incumbent, William Baillie, in 1832. The Daily Chronicle obituary on the Kew Araucaria planted out by McNab included the comment that the Dropmore King William tree was, in 1880, 63 feet high. Charles Herrin, the Dropmore head gardener who succeeded Frost, submitted a correction to The Gardeners' Chronicle stating that the tree was currently only 50 feet high (T.G.C., 1893).

The Kew Goods Outwards Book has no record of the last Menzies tree but Smith (1880), who worked at Kew when the gift was made, recorded it was given to the Prince Consort in 1841. Prince Albert had this tree planted in Windsor Castle Garden. Smith (1880) reported that the Windsor tree did not grow much.

Menzies definitely brought back five trees but the existence of the gala tree suggests it may be six.

Post Archibald Menzies—pre James Macrae (1795-1826)

In July 1827 Loudon visited Lord Grenville's Dropmore pinetum and stated: "There is a very good plant of Araucaria imbricata ...which is protected from frost during the winter months ...A. imbricata is believed to be quite hardy, but has not yet been exposed here to frost without protection" (T.G.M., 1828). The tree had been planted out in 1824 and was already 4 feet high, so where had it come from? Herrin provided a possible answer when he said of a tree he claimed was planted in 1830 that: "It had been raised from a cutting taken from the plant in Kew Gardens which Lord Grenville sent his gardener to purchase from Knights' nursery as a mere branch with a few roots for ten guineas" (T.G.C., 1893). Smith (1880) made reference to the rumour of a stolen tree growing at Dropmore stating that the 1833 King William tree: "Was much inferior to another plant at Dropmore said to be the produce of a cutting stolen by a lady from the original plant at Kew nearly fifty years ago".

In 1820 Kew included *Araucaria* in batches of plants sent to His Serene Highness the Duke of Saxe Weimar and, in 1824, sent *Araucaria* cuttings to the Clive estate of Oakley Park, near Ludlow. Kew's records also confirmed cuttings of *Araucaria* were included in a batch of plants sent to Her Royal Highness the Landgrafin (*sic*) of Hess, Hamburgh in 1828 (Kew 1836). The Kew records specified species sent, not quantity, but it confirmed they had mastered the technique of taking *Araucaria* cuttings at around the time of, or possibly before, Banks's death in 1820. In 1826 James Macrae returned from Chile with his trees and seed and, with trees now available for free from the Horticultural Society, Kew had little reason to keep striking cuttings. It is unlikely Lord Grenville would pay ten guineas for a cutting in 1830, especially when he had already received a free Macrae tree form the Horticultural Society in 1826. It is more likely the 1824 planted tree Loudon saw at Dropmore in 1827 was the allegedly stolen Kew cutting, and Herrin was mistaken when he stated it was planted in 1830.

In 1835 Loudon commented that *Araucarias* had stood well at Banks's estate, Spring Grove, as well as in numerous other pineta (T.G.M., 1d, 1835). As the original Spring Grove Menzies' tree died soon after planting, where had these trees come from? One option, if they were planted before Banks's death in 1820, was that they were Kew cuttings, but if not, they could be post 1826 Horticultural Society supplied trees planted by Spring Grove's new owner.

By the time Macrae left for Chile in 1824, Europe's *Araucaria* population consisted of the Kew tree planted out by McNab, the two surviving Menzies araucarias in a Kew glasshouse and an unconfirmed number of trees, established from cuttings, growing both in the UK and Germany. Meanwhile Peoppig reported that *Araucaria* had been introduced into France pre 1822 (Hooker, W. J., 1835) and there were also seedling trees in other European countries. For example, in Foreign Notices from Italy *Araucaria* was noted growing at the Villa Silva, north of Milan (T.G.M., 1a, 1840) and in 1841 it was announced at a meeting in Turin that the first *Araucaria* had flowered in Europe in the garden of the Marquis Ridolfi, near Florence (T.G.C., 1a, 1841). This tree must have been planted in the 1820s.

James Macrae — Horticultural Society plant collector (1824–1826)

James Macrae, was the Horticultural Society's botanist and plant collector appointed to sail on the *Blonde*, on a journey to the Sandwich Islands (Hawaii) which called at Valparaiso on 4 February, 1825, and made a return visit on 6 September, finally returning to England in March 1826. His instructions from the Society were clear: *You will especially enquire for, and send home, plants and seeds of the Chilian Araucaria*. Also, as instructed, Macrae meticulously maintained a daily diary of his journey (Macrae, J.).

The first stay at Valparaiso was a short one and was hindered by a small-pox outbreak on board ship, but he had time to meet Mr Cruickshank, a contact of William Jackson Hooker, Professor of Botany at Glasgow University. While visiting Cruickshank, Macrae observed him preparing packages of bulbs and seeds for dispatch to Hooker. Macrae's observation that Cruickshank was sending Chilean seeds to Hooker in 1825, and the statement by Hooker (1835) that, in 1826, Stewart Murray, curator at Glasgow Botanic Garden, grew *Araucaria* from seed supplied by Mr Cruickshank, confirmed that contacts were in place to provide *Araucaria* seed prior to Macrae reaching Chile. What Murray did with his trees is unknown but there may be Scottish estates that received *Araucaria* seedling trees from this source.

While in Valparaiso, Macrae also met His Majesty's Consular General, Mr Nugent, and asked him to arrange for a supply of Chilean pine seed to be brought up from the coastal town of Concepción where the trees grew in abundance.

During his second visit, Macrae visited Concepción and noted *Araucaria* trees were a regular feature in larger gardens. On account of unrest amongst the native Indians he was unable to travel to the *Araucaria* forests, but Mr Cruickshank introduced him to Dr Green and Macrae collected two cones from his trees. Before leaving Concepción, Macrae arranged for Dr Green to send supplies of *Araucaria* seed and plants to the Horticultural Society in London. He also met Mr Bullard, recently out from London, who had agreed to be a corresponding member of the Society and intended to collect all kinds

of seeds and plants for them. By 1826, there was a network in place to supply Chilean sourced seed to both the Horticultural Society in London and Glasgow Botanic Garden.

Macrae's request to Nugent to supply seed was successful. When packing to leave, he "Put up for Mr Nugent, thirty-six parcels of Araucaria seed to home by the Blonde. Twelve of these were in sugar and the same in sand, the other in paper, to try the experiment, which way the most likely to vegetate the best on their arrival in England". Nine days after leaving Chile Macrae noted his plants in their boxes were doing well and he had seeds of Araucaria coming up.

As they neared England Macrae recorded that many of his plants were killed in their boxes through seawater contamination of their soil. Despite this, Dr Lindley advised the Horticultural Society's Council, on 7 April 1826, that Macrae had returned with "a most important collection... the most interesting yet been received at the garden". It was proposed that a silver medal be awarded to Mr Nugent "for the services provided to the Society.... and thanks given to Macrae for his successful exertions in sending alive to England, plants of the Chilean Araucarian Pine" (Horticultural Society, 1826). In October 1826 the first 12 Macrae *Araucaria* seedlings were distributed: one each to the public (botanic) gardens at Cambridge, Oxford, Edinburgh, Glasgow and Liverpool; one each to the following nurserymen, who were described as double subscribers as well as generous benefactors of the society: Mr Loddiges (of Hackney), Mr Lee (Lee and Kennedy of Hammersmith), Mr Ronalds (of Brentford) and Mr Jenkins (of Marylebone); and finally, one each to the following fellows of the Society whose collections of the pine tribe were the most remarkable in the country: The Duke of Bedford (Woburn, Bedfordshire), Lord Grenville (Dropmore, Buckinghamshire) and Mr Lambert (Boyton, Wiltshire). In a subsequent set of minutes dated 11 November, the secretary confirmed the trees had been dispatched but apologised that Dublin Botanic Garden had been overlooked. However, another tree had been located and would be included within a consignment of plants being sent there (Horticultural Society, 1828).

Enquiries as to the fate of these trees produced the following results:

- Cambridge Botanic Garden moved to its current site in 1841. It was unlikely any trees were transplanted from the old site and their plant records only go back to 1870 (Cambridge Botanic Garden, 2016).
- Oxford Botanic Garden records were destroyed circa 1900. The only *Araucaria* tree they currently have was planted in 1950 (Oxford Botanic Garden, 2017).
- In 1963 the RHS enquired about the Macrae tree sent to Edinburgh's Botanic Garden and received a reply confirming that: "No specimen of Araucaria of that age (1826) existed in the garden". The author of the Edinburgh letter asked the RHS whose Araucaria introduction they were referring to, as he: "thought Menzies brought in the first tree about

1795 and then Lobb about 1845" (RHS, 1963). It was not surprising there were no large trees at Edinburgh. Several of the garden's araucarias died in the severe winter of 1861 and were cut down. The largest had 30 perfect growth rings which would fit with it being the Horticultural Society tree (The Edinburgh New Philosophical Journal, 1862).

- Glasgow Botanic Garden, established in 1817, moved to a new site in 1839. A weeping ash was transplanted from the former garden but it is unclear if the araucarias in the new garden were transplanted trees or new establishments (Glasgow Botanic Garden, 1849).
- The records for the original Liverpool Botanic Garden were burnt by soldiers billeted there during World War II (Lyus, S., 2016).
- Of the nurserymen who received trees, Loddiges Nursery is remembered by a blue plaque on a wall in Hackney. The other London nurseries, along with their pineta, have also gone.
- By 1838 Woburn had a glasshouse specifically for *Araucaria* but there were no records confirming what species were grown there, nor receipts for trees received (Woburn, 2017)
- Dropmore received their tree by 14 October (Sabine. 1826). Planted into the pinetum in 1830, it became an outstanding specimen. It died in 1902 and was cut down in 1905 (T.G.C. 1a. 1902. T.G.C. 1905).
- There are no mature *Araucaria* trees at Boyton. The only one currently growing on the estate is a recently planted sapling (Boyton, 2016).
- The fate of the Dublin Botanic Garden Macrae tree is unknown.

Post Macrae - Pre William Lobb (1826-1840)

Loudon's launch of *The Gardener's Magazine* in 1826 coincided with Macrae's return and barely a year passed without articles, letters and references being published concerning *Araucaria*.

In 1829 Jacob Rinz visited Kew and on seeing their Menzies tree said of it: "What a picturesque and magnificent tree it must be in its native country" (T.G.M., 1829). He also said: "Of all the parks he visited, Dropmore, where he saw some Araucarias that were standing in the open air with protection, pleased him the most". In 1829, John Brooks of Flitwick House planted an Araucaria which, by 1843, was nine feet high (T.G.M., 1c, 1843).

Throughout the 1820s and 1830s Loudon gathered data about *Araucaria* for inclusion in *Arboretum et Fruticetum Britannicum*. When visiting Mr Donald's nursery and arboretum at Goldworth, near Woking, he noted: "That noble tree *Araucaria imbricata* (planted out in 1832) has stood out three years without the slightest protection". In the same year he said of Berlin's Botanic Garden, which contained an *Araucaria* grown from seed which Poeppig had sent to Germany in 1829, that: "Most of the American species of the genus Pinus stand in the open air here" (T.G.M., 1a, 1b, 1835). Of the six surviving Poeppig trees, the specimen in Leipzig "flourished beautifully and was about twenty inches high". Poeppig also



Philip Frost standing by the Dropmore Macrae tree. Photograph taken in 1872 and used to illustrate an article about the Dropmore Pinetum that appeared in *The Gardeners' Chronicle* dated 5 October 1872. I inherited a copy of this photograph which had passed down from Philip Frost to his daughter Mary and thence to her son, W. F. Gedye, my grandfather.

claimed his trees were the best and, to his belief, the only ones in Europe, to which W. J. Hooker added the footnote that Murray raised trees in Glasgow in 1826 (Hooker, W. J., 1835).

Hooker and the Horticultural Society had seed supply arrangements in place in the 1820s and others had the same. Shephard (2003), and others, claimed that James Barnes purchased his seed for the trees of Bicton's *Araucaria* avenue from Loddiges, but Barnes (T.G.C. 1871) contradicts this. When writing a history of *Araucaria imbricata* he stated: "Between 1822 and 1836 several lots of seed were brought over, and many plants were raised and distributed, so that they were to be seen of various sizes, and growing freely in many of the best gardens. The memorable winter of 1837 killed many of these thriving trees. Between 1837 and 1840 large quantities of seed were brought to this country, and numerous plants raised and distributed to all parts of the United Kingdom. The Messrs. Loddiges of Hackney raised a large number, and of these a batch was sent to Bicton in 1839/40 – seedlings in 60sized pots"—which Barnes potted on. They became the trees of Bicton's avenue. The Duke of Bedford sent his son, Lord Edward Russell, to Chile in the Spring of 1838. He returned with an *Araucaria* cone and Woburn grew their own tree from the seed (*Pinetum Woburnense*, 1839).

In 1835 Loudon stated: "The Araucaria imbricata is found to stand the open air quite well in the neighbourhood of Edinburgh and it has stood well at Kew, Dropmore, Goldworth arboretum, Spring Grove, etc., it may probably be just as hardy as the common Cedar" (T.G.M., 1d, 1835). In 1835 Edinburgh Botanic Garden sent a tree they had grown to Cairnsmore, Kirkcudbright. Planted out in 1837, it was, in 1862, the finest example in Scotland (Ravenscroft, E., 1884).

As mentioned by Barnes (above), the winter of 1837/38 was exceptionally hard and did a lot of damage to trees in arboreta and pineta. Lambert reported that his *Araucaria* at Boyton was quite hardy (T.G.M., 1a, 1837), a point confirmed by Bowood and Bicton estates. Philip Frost reported that at Dropmore all of his *Araucaria* species, bar *imbricata*, were killed off and made the comment: "I am now convinced this very splendid tree is perfectly hardy, and ought to be on every gentleman's lawn or in his pleasure ground" (T.G.M., 1d, 1e, 1f, 1838). By 1840, Highclere in Hampshire and Belsay in Northumberland, had *Araucaria* trees that had survived the frosts and were eight feet high (T.G.M., 1b, 1840).

Loudon published *Arboretum et Fruticetum Britannicum* in 1838 in which he quoted statistics for 22 principal pinetums in England, Scotland, Ireland and Germany. Eighteen of them, from an arboretum at Redleaf in Kent to Mr Roy's nursery in Aberdeen, had established *Araucaria* trees, including a tree in France that was 11 feet high. He also commented on the size of an *Araucaria* in Leipzig. Many were still seedlings but the tree at Dropmore was 8 feet, while the Horticultural Society's tree at Chiswick Garden was 6 feet. A further 19 pineta, some of which definitely had *Araucarias* by 1838, and 11 plant nurseries, were praised for their pine tree collections with two nurserymen

singled out for their extensive seed collections (Loudon, J. C., 1838; T.G.M., 1a, 1838). Loudon also stated that Dropmore was the only place he knew that was successfully producing *Araucaria* trees from cuttings, yet Highclere's gardener had earlier reported he had been producing cuttings since 1835 (T.G.M., 1b, 1837).

By 1838 *Araucarias* were growing in pots at Hendon Rectory and numerous trees had been planted at Chatsworth and at Elvaston Castle (T.G.M., 1b, 1c, 1838). Loudon also extolled the Duke of Richmond to distribute through his park and grounds at Goodwood House "That noble tree, the Araucaria imbricata, of which there is now an abundance of plants in the country" (T.G.M., 1a, 1b, 1839). In the *Gardeners' Chronicle* a reader wrote about his sickly *Araucaria* he had planted in May 1838 and several araucarias, from 1 ft to 7 ft high, were reported growing at Bayfordbury, near Hertford (T.G.M., 1c, 1840). In 1842 it was reported that trees had succeeded well at Alton Towers, Sudbury Hall and Birmingham Botanic Gardens (T.G.C., 1a,1c, 1e, 1842).

In answer to an enquiry made of him, Philip Frost stated that "he has succeeded in striking cuttings with gentle bottom heat" but was of the opinion that "when handsome plants can be obtained at the nurseries for five shillings it is not worthwhile striking cuttings" (T.G.C., 1f, 1842).

James Veitch and William Lobb (1840-1843)

James Veitch had, for some time, harboured an ambition to finance his own plant collector. By 1840 he was ready to put his plan into action. However, the loss of their investment by the Duke of Devonshire and a consortium of nurserymen when two members of Chatsworth's garden staff drowned in the Columbia River while plant collecting in 1838 (Shephard, S., 2003; Musgrave, T., 2007), was a salutary lesson for someone thinking of shouldering the full funding risk on their own. Veitch was a competent nurseryman and would have known that there was no guarantee Lobb would find new species. Moreover, it took time to multiply up stock to get a commercial return. It made sense to plan a commercial hedge into the venture.

According to Shephard (2003), Veitch's judgement that the monkey puzzle tree would be hugely popular, was based on a few rare specimens he had seen growing at Kew. Yet if James Veitch wanted to see an *Araucaria* he only had to visit Lucombe, Pince & Co's Exeter nursery, where one had been growing since 1832 (T.G.M., 1a, 1843), or visit Bicton, where he was consultant on the planting of their *Araucaria* avenue. By 1842 Bicton had a specimen *Arucaria imbricata* that was upwards of 13 ft high (T.G.C., 1a, 1842) as well as the pot grown plants they had received in 1839 from Loddiges. By reading Loudon's publications, and from discussions with fellow nurserymen, Veitch was well aware that *Araucaria imbricata* was widespread across estates and botanic gardens and that his competitor nurserymen were selling seed and seedlings. An obvious commercial hedge, if you were

sending your plant collector to South America, and one on which you could make a quick return, was to instruct Lobb to go to Chile to gather substantial quantities of *Araucaria* seed.

In February 1841 Loudon informed his readers that Lucombe, Pince & Co. of Exeter had four plants for sale (T.G.M., 1841). In its first edition, published January 1841, *The Gardeners' Chronicle* carried an advertisement from Thomas & Edward Brown of Piccadilly, for foot high trees at two guineas each, and reported that Mr. Pontey, nurseryman of Plymouth, had raised a fine crop of the rare plant *Araucaria imbricata*. Subsequent editions carried in quick succession: an advertisement from W & F Youell of Great Yarmouth who had several dozen trees for sale; the addition of *Araucaria imbricata* to the list of plants available from William Masters, nurseryman of Canterbury; an advertisement for plants for sale at William Rendle's Union Road Nursery, Plymouth; and one from M Skirving, of Walton Nursery, Liverpool, advertising that he had grown from seed: "A considerable quantity of that rare and beautiful tree which he now offers at £25 per 100" (T.G.C., 1a–1f, 1841). Skirving had sold his first trees from his Liverpool nursery around 1834 (T.G.C. 1881). Veitch's competitors had a head start on him.

There must have been relief at the Veitch nursery when Lobb's Araucaria seed reached them but the commercial pressure continued. In February 1842, Youell & Co. of Great Yarmouth, who had advertised trees in 1841, now advertised they had, available through their London agents at three guineas a dozen, "Fine strong plants one year from seed of this, the most noble, hardy, and splendid ORNAMENTAL EVERGREEN TREE ever introduced into the British Empire" (T.G.C., 1b, 1842). In June, Mr Skirving's Liverpool nursery advertised they had 2, 3 and 4-year old pot grown plants for sale (T.G.C., 1d, 1842). Loudon reported in September 1842 that Lucombe, Pince & Co. had amongst their general nursery stock: "Hundreds of Araucaria seedling trees, from 18 inches to 2 feet high" (T.G.M., 1a, 1843). Given the slow rate at which Araucaria grow in their early years, these trees had to be upwards of three or more years old. In October, Youell & Co. advertised: "Possessing by far the largest stock in the country of this most noble hardy plant, which is in the course of planting by most of the Nobility. They had reduced their price to £3 for a dozen trees (T.G.C., 1g, 1842). Youell's had been introducing plants from Chile for many years and Grigor (1841) verified their claim to have a large stock of trees when he wrote of their nursery, "the most attractive and unexpected sight here is their very extensive stock of that beautiful tree, Araucaria imbricata".

In 1842 Loudon visited Veitch's recently created nursery at Mount Radford, Exeter, and wrote: "They have a collector in South America, who has lately sent them some bushels of seeds of Araucaria imbricata, from which they have already raised thousands of plants, so that this fine tree will soon be as common as the Cedar of Lebanon" (T.G.M., 1b. 1843).

In May 1843, Messrs Hurst & McMullen, Leadenhall Street, London,



Another inherited photograph, passed down from Philip Frost to his daughter Mary and thence to my grandfather. It is reasonable to presume it was taken at the same time as the main tree photo (1872). Given the special treatment of a railing around it I surmise it may be the King William tree, i.e. the Menzies tree given to Dropmore in 1833.

advertised that: "Having had consigned to them a quantity of seed of this splendid hardy tree in good condition, can offer them for sale at fifty shillings per hundred with an extra ten seeds thrown in to allow for any germination losses" (T.G.C., 1a. 1843). On the same page, Veitch's nursery, within a larger nursery advertisement made a low key two line reference that they had *Araucaria* trees available at very

low moderate prices. The nursery later expanded their advertisement to read: "Having raised a considerable number of the Splendid Hardy Ornamental Tree, are enabled to offer fine healthy plants from 4–6 inches in height at the following moderate prices viz: £10 per 100". The larger advertisement confirmed they had appointed Hurst & McMullen their London agents (T.G.C., 1b, 1843). Veitch stopped advertising Araucaria after twelve weeks. Meanwhile, Youell & Co. continued to offer: "Fine robust 4yr. old plants 8–9 inches high at £10 per 100" (T.G.C., 1c, 1843). Their trees were older, larger and just as numerous, as Vietch's. Still claiming they had the largest stock in the country, Youell continued advertising trees until June 1845 (T.G.C., 1845). Between Youell & Co., Veitch and the other nurserymen, the market had been well supplied. Araucaria trees were no longer a novelty.

Conclusion

Condensing the story of the monkey puzzle tree's introduction into the statements that Menzies introduced the first trees to the British Isles in 1795 and Veitch's nursery, using Lobb's seed, reintroduced the species in 1843, after which the tree became widespread and popular, is misleading. It fails to give credit to those who, between 1795 and 1840, established *Araucaria araucana* as a component of pineta, arboreta, parks and gardens.

The credit for introducing the first seedling trees will always go to Archibald Menzies. Credit for reinvigorating interest in the tree should go to the Horticultural Society (subsequently the Royal Horticultural Society) and their plant hunter, James Macrae. When Macrae returned with his seedlings and seed in 1826 three of Menzies six trees were still alive and numerous other trees were growing in pineta in the British Isles, Germany and elsewhere across Europe. Meanwhile, Stewart Murray of Glasgow Botanic Garden, using seed sourced directly from Chile, had also been growing trees.

It is inaccurate to claim that Macrae reintroduced the species into the British Isles just as it is inaccurate to claim Lobb did so. You can only reintroduce a species into an environment if the species had been present and then totally disappeared. That was never the case with *Araucaria*.

Menzies and Macrae were the two leading plant collectors who brought living trees back from Chile, but the credit for establishing *Araucaria* across the country should be given to the owners of large estates, their head gardeners and the plant nurserymen who sourced and supplied them with viable seed and trees. The information published about their work by John Claudius Loudon confirmed that the tree was hardy and could tolerate a wide range of growing conditions and may well have influenced James Veitch to send Lobb to Chile just as much as he was influenced by seeing trees growing at Kew or elsewhere. Veitch sending Lobb to Chile was more probably done to increase the chances of making a quick return on his capital outlay rather than in the hope he might "rediscover the monkey puzzle tree". Lobb rewarded Veitch

by supplying a large volume of *Araucaria* seed, but it was James Macrae's trees and seed that began the tree's resurgence, and it was nurserymen like Youell and Loddiges who fuelled the tree's popularity by selling seed and trees before Veitch, and possibly in larger numbers than Veitch.

Footnote

My interest in monkey puzzle trees began with a family story about my greatgreat-grandfather, Philip Frost of Dropmore, growing the very first monkey puzzle tree in England. I soon realised this could not be true. Philip Frost was born in 1804, nine years after Menzies brought back the first trees, but there are always grains of truth in stories passed down the generations. Frost had the privilege of growing a Menzies original tree (the King William tree) and a tree raised from a cutting from a Menzies original tree (the stolen cutting). He also grew one of the trees Macrae germinated while still on board the Blonde and given to Dropmore in October 1826 by the Horticultural Society. It was planted into the pinetum in 1830 and, from all the descriptions, became the finest Araucaria of the nineteenth century, Veitch's nursery acknowledged the tree's stature when they wrote "Of the larger trees of known repute the first place must be given to the superb specimen at Dropmore" (Kent A. H., 1900). In 1850, Lady Grenville commissioned the botanical artist, William Richardson, to paint the tree (Gedye, D., 2016). In 1870 Augustus Mongredien used a painting of the tree as a frontspiece to his book, *Trees & Shrubs for English Plantations* (Mongredian, A. 1870). In 1872 Frost was photographed standing in front of it (T.G.C., 1872). Veitch's nursery used a photograph of the Dropmore tree to illustrate their 1881 Manual of Coniferae (Veitch, 1881; The Garden, 1883). Ravenscroft sent William Richardson back to Dropmore to paint the tree for his book, Pinetum Britannicum (Ravenscroft, 1884). Shephard (2003) used the Ravenscroft illustration in her book "Seeds of Fortune", the history of the Veitch family and in "Blue Orchid and Large Tree", the story of the Lobb brothers, co-written with Musgrave (Shephard & Musgrave, 2014). Photographs of the tree are held in the Phillimore family albums (Phillimore) and framed photographs of it hang in the RHS Lindley Library. Elwes and Henry (1906) used a photograph of it taken in 1903. It was, by then, dead and was cut down in 1905.

I own three original photographs of my great-great-grandfather's trees at Dropmore. The photos with Frost in front of his Monkey Puzzle and Douglas-fir were taken for *The Gardeners' Chronicle* article (T.G.C. 1872). It is very likely the photo of the monkey puzzle with the railing round it was taken at the same time. I am not aware of any other tree at Dropmore being given similar treatment. Aubrey Bartlett (T.G.C. 1b. 1902), the Pencarrow head gardener who worked at Dropmore for seven years from 1888 until 1895, quoted how Frost described the location of the King William tree within the pinetum as follows: *"This tree (No. 17) was given to Lord Grenville by King William IV from Kew and planted near the Douglas-fir by the walk and transplanted by me to the other*



The Dropmore tree, photograph taken 1903 and published 1906 (by which time the tree had been felled) in *Trees of Great Britain and Ireland* by Elwes and Henry.

side of the walk when 28 feet 6 inches. The description fits the photograph which makes it the only known photograph of an original Menzies tree. The tree survived being transplanted and in 1902 was 35 feet high (T.G.C. 1902). Herrin seems to have been mistaken, or guessing, when he claimed it was 50 feet in 1893. Its' date of death is unknown.

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