



Botany Bound – Botanists On Board

Botanists study plants. All ships in the *Sea Chest Secret* exhibition (HMB *Endeavour*, HMS *Resolution* I and II and HMS *Bounty*) carried official botanists on board. Most of these botanists were carried to record and collect plant specimens that were new to Europeans. When the botanist David Nelson sailed on HMS *Bounty*, he was employed to look after a breadfruit crop, rather than discover new species.

The United Kingdom had various botanical organisations which collected plant specimens from around the world. Kew Gardens (becoming Royal National Botanic Gardens), The Royal Society and Natural History Museum of London all accepted specimens for their collections and gardens. Kew Gardens consisted of a house on eleven acres of land when purchased in 1721. The Prince and Princess of Wales and Lord Bute (a botany enthusiast) used it as a retreat. With the royal patronage, Kew Gardens became known as the Royal Botanic Gardens and was opened to the public in 1760. Exotic seeds and plants were collected and propagated and buildings and glasshouses were erected. When Bute died, Joseph Banks was a natural successor for running Kew Gardens.

HMB *Endeavour*

Two botanists officially sailed on HMB *Endeavour* – Sir Joseph Banks and Daniel Solander (who also acted as doctor). Banks would collect specimens, Sydney Parkinson would sketch them, then Solander would write notes on the name of the species and Banks wrote the locality or where it was found.

The famous botanist Sir Joseph Banks meticulously collected around 1 400 plants and more than 1 000 animals (most of which were unknown to European scientists). Banks held the collection at his home in Soho Square, London, allowing interested scientists easy access to it. Shortly before Banks' death in 1820, the collection was bequeathed to Robert Brown (Banks' curator/librarian) who passed it onto the British Museum of Natural History in 1827. Amazingly, findings from the HMB *Endeavour* voyage were never fully published until 200 years after the voyage. Banks' *Florelegium* showing the plant illustrations from HMB *Endeavour* was not published until 1980!

Daniel Solander's main duty was to preserve plant specimens and write scientific notes. Solander had been a student of Linnaeus (who developed the classification system we use today). When HMB *Endeavour* returned with more than 1 000 previously unknown plant specimens, Linnaeus was greatly impressed and both Banks and Solander gained celebrity status.

HMS *Resolution* I

HMS *Resolution* I carried on board the naturalists Johann Reinhold Forster and his eldest son George Reinhold Forster (aged 18). Joseph Banks was scheduled to sail on HMS *Resolution* I, but he was dissatisfied with the refitting of the ship and having to reduce the number of people he was allowed to take. As a result, Banks withdrew from the voyage and Johann & George Reinhold Forster were appointed. Johann was reputedly a difficult man to work with. Cook did not describe him favourably in his journal and was particularly unimpressed when George Reinhold published his journal of the voyage before Cook had an opportunity to do so.

Upon their return to England, the Forsters gave away or sold their specimens, but they hurriedly published their plant notes and drawings (within four months) as *Characteres Generum Plantarum*. George's collection of natural history drawings are now located in the British Museum of Natural History.

Also on their return, they were requested to present 32 drawings on parchment and paper to King George III, but a quarrel with the Admiralty resulted in the appointment being cancelled. Left with expensive paintings (which they had commissioned an artist to render) and running into debt, George travelled around Europe for three years, attempting to sell the paintings to scientists and royalty. Eventually, a Duke purchased them in 1781. Still in debt, Johann was forced to sell George's original drawings to Sir Joseph Banks and later to the British Museum of Natural History.

HMS Resolution II

On HMS *Resolution II*, Cook was reluctant to carry another botanist due to his bad experience with the Forsters. David Nelson was a gardener at Kew Gardens and was employed by Joseph Banks to collect specimens. There are very few specimens collected by David Nelson remaining, although it is known he collected *Kokia drynarioides* from Hawaii (depicted in the exhibit **Botany Bound**). A full list of plants collected during the voyage of HMS *Resolution II* is included in the support notes *Plants Collected During the Voyages*.

Nelson is credited with having introduced the following plants to the Royal Botanic Gardens at Kew:

<i>Podalyric sericea</i>	from Cape of Good Hope
<i>Oxylobium elliptium</i>	from Van Diemens Land (Tasmania)
<i>Melaleuca squarrosa</i>	from Van Diemens Land and NSW
<i>Eucalyptus obliqua</i>	from Van Diemens Land
<i>Rumex Giganteus</i>	from Sandwich Islands (Hawaii)

Also – the Cleveley brothers on HMS *Resolution II* drew a few plants and animals. John Cleveley was chosen by Banks to go on HMS *Resolution I* and was also on HMS *Resolution II*. Only six of his paintings survive from HMS *Resolution II*. His younger brother James Cleveley was HMS *Resolution II*'s carpenter and had some artistic skill. Only two of his natural history paintings survive.

HMS Bounty

HMS *Bounty* also carried David Nelson, who was employed to help transport breadfruit from Tahiti back to the United Kingdom. Nelson was certainly well liked by Cook, Bligh and crew on board both HMS *Resolution II* and HMS *Bounty*. He had a gentle nature and great enthusiastic vigour for his work. Even when the mutiny was occurring on HMS *Bounty*, Nelson was ordered below deck so he would not be involved unduly. Nelson was set adrift with Bligh after the mutiny (see HMS *Bounty*'s journey for more information). He survived the trip in the longboat until they arrived safely at Batavia, Timor. He died five weeks later from an inflammatory disease in 1789, believing that he ate poisonous berries that he could not identify.

When Bligh sailed to Tasmania in 1792, he named Nelson's Hill (called Mount Nelson today) out of great respect for the botanist. The botanist Robert Brown dedicated the genus *Nelsonia* of Acanthaceae to Nelson's memory.

Other crew of scientific background on HMS *Bounty* included William Brown (gardener) and Thomas Ledward (acting surgeon).