

YOUR VIRTUAL DISCOVERY VISIT – 70 TO THE HERITAGE STORIES OF ROTTNEST ISLAND



The Virtual Visit series was initiated during the COVID-19 pandemic when Rottnest Island was closed to the public due to social distancing restrictions and periods of use for quarantine from March to June 2020.

Now that the Island is again open to visitors, these Virtual Visits are continuing in 2021 to enable a further enjoyment of stories introduced at the Wadjemup Museum, the Chapman Archives, or sites around the Island. Enjoy, reflect, and share.

Hidden History Behind Plant Names

The name of a plant is based on an original description, the earliest use of the name generally being the most relevant, dating back as far as 1753 for flowering plants, when Linnaeus published his concept of the binomial naming system. At the simplest level of scientific classification, each plant has a name made up of two parts, a genus (or generic) name and a specific name or epithet. Together, these two names are referred to as a binomial.

A genus name is a 'collective name' for a group of plants. It indicates a grouping of organisms that all share a suite of similar characters. The specific name allows us to distinguish between different plant species within a genus.

Binomial names are always written with the generic name first, starting with a capital letter, The specific epithet always follows the generic name, starting with a lower-case letter. Generic and specific names are generally in Latin or are Latinised words from other languages, particularly Greek. Specific epithets need to conform to certain grammatical rules depending on the generic name. Other derivations are also sometimes used, including place names, descriptions of plant parts, Aboriginal names, and often the names of botanists and others.

A remarkable dictionary about the meaning of the names of Western Australia plants was compiled by State Librarian Francis Aubie (FA) Sharr (1914-2002). First published in 1978, it has been revised and expanded by leading WA botanist, Alex George, with a 4th edition published in 2021.



For example: *Lepidosperma gladiatum* - Coastal sword sedge is a common sight near the Rottnest coast and is widespread and locally very common from Leeman to Cape Arid National Park. It grows from in full sun to shade and in frontal exposed sites on primary dunes to swales and peaks of secondary dunes. It is a keystone species in restoration because of its vigorous growth, sand-binding root system and clonal habit. Plants also respond to some levels of sand burial and can be used as part of the stabilising approaches in exposed dunes.

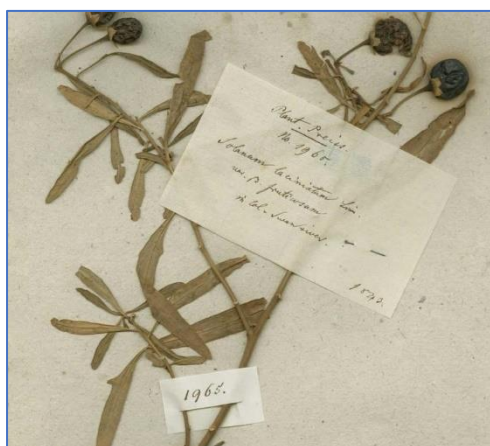
*Photo of **Lepidosperma gladiatum** in Settlement courtesy Jon Dodd*

Lepidosperma means 'scaly seed' (fruit) and gladiatum 'sword like' (leaves). The Roman legionnaire's short sword was the 'gladius'.



As you can see from the sections which follow, many plants on Rottnest are named after people. Like the flora of Rottnest, some names are well known and recognised while others are less well so. Collectively they provide an insight into both biology and the history of Australia.

Johann August Ludwig Preiss (1811-1883), naturalist, was born at Herzberg am Harz, Germany. He arrived in the Swan River settlement in December 1838, became a naturalized British subject in 1841, but left for London in January 1842. He visited Rottnest in late 1839 and collected around 50 land plants and mosses/He settled at Herzberg am Harz in 1844 and died there. Preiss was primarily a plant collector, but he made extensive collections of natural history specimens of all kinds. During his activities, he visited most of the known parts of south-western Australia and several islands off the coast.



Preiss's very large collection of about 200,000 plant specimens was described and published in Hamburg in parts in 1844-47 under the title *Plantae Preissianae Sive Enumeratio Plantarum Quas in Australasia Occidentali et Meridionale Occidentali Annis 1838-41 Collegit L. Preiss*. Because of Preiss's thoroughness as a collector and the large number of species described and named for the first time in the *Plantae Preissianae*, it is an important reference work for the study of the Australian flora.

Some of the flora attached to Preiss present on Rottnest are the Rottnest Island pine ***Callitris preissii*** (Bush Book – Plants of Rottnest Island – page 8) and the Prickle lily ***Acanthocarpus preissii*** (Bush Book – Plants of Rottnest Island – page10).

Heinrich David August Ficus was the son of a pharmacist who began an apprenticeship in 1795 in his father's "Mohrenapotheke". After working as an assistant in Kamenz, Prague and Breslau, he began studying at the Collegium medico-chirurgicum in Berlin from 1803. In 1804 he passed his pharmacist examination in Dresden and in 1806 he received his doctorate in medicine from the University of Wittenberg.

In 1814 he was appointed professor of physics and chemistry and in 1817 he took over the professorship for natural history, pharmacy and general and special therapy at the veterinary school. On the side he ran his father's pharmacy. Ficus died in Dresden in 1857. In addition to his official duties, he wrote several literary works dealing with subjects in the fields of botany, optics, and mineral chemistry. His contributions to botany are recognised with the Knotted club rush, ***Fincinia nodosa***. (Bush Book – Plants of Rottnest Island – page14).

Henricus Gahn was a Swedish botanist whose name is attached to the coastal saw-sedge, ***Gahnia trifida***. (Bush Book – Plants of Rottneest Island – page 16).

Johann Olearius (1611 – 1684) was a German hymnwriter, preacher, and academic. Olearius taught philosophy at the University of Wittenberg and also served as a court preacher and chaplain. He compiled "one of the largest and most important German hymnals" of the 1600s. His name is not related to the oleander (which has been removed from Rottneest) but to the Coastal daisy bush, ***Olearia axillaris***. (Bush Book – Plants of Rottneest Island – page 32).

<https://www.youtube.com/watch?v=iozi3TqiTMM>

Adriaan (Adrianus) de Beijer (1773 – 1843) was a Dutch botanist and Secretaris en Plantkundige who studied the ferns and mosses of Batavia (Sharr, 2021). The Pinkwood, ***Beyeria viscosa***, found on Rottneest bears his name. (Bush Book – Plants of Rottneest Island – page 44)

John Templeton (1766–1825) was a pioneering Irish naturalist, sometimes referred to as the "Father of Irish Botany". He was a leading figure in Belfast's late eighteenth century enlightenment: He figured prominently in the town's scientific and literary societies.

Templeton's interest in botany began with an experimental garden laid out according to a suggestion in Rousseau's 'Nouvelle Heloise' and following Rousseau's 'Letters on the Elements of Botany'. His botanical studies lasted throughout his life and he corresponded with the most eminent botanists in England: Sir William Hooker, William Turner, James Sowerby and, especially Sir Joseph Banks, who had travelled on Captain James Cook's voyages, and was later in charge of Kew Gardens.



Banks tried unsuccessfully to tempt Templeton to visit New Holland (Australia) as a botanist on the Flinders' Expedition with the offer of a large tract of land and a substantial salary. An associate of the Linnean Society, Templeton visited London and saw the botanical work being achieved there.

*Photo of **Templetonia retusa** in blossom on Rottneest courtesy Jon Dodd*

This led to his promotion of the Belfast Botanic Gardens as early as 1809, and to work on a *Catalogue of Native Irish Plants*, in manuscript form, which was used as an accurate foundation for later work by succeeding Irish botanists. He also assembled text and executed many beautiful watercolour drawings for a *Flora Hibernica*, sadly never finished. Cockies tongue, ***Templetonia retusa***, is named in his honour. (Bush Book – Plants of Rottneest Island – page 50).

The next species has only an indirect link to a famous botanist. ***Scaevola crassifolia***, the fan flower, (Bush Book – Plants of Rottnest Island – page 52) is in the same family as the blue leschenaultia, ***Leschenaultia biloba***. This is one of Western Australia's best known wildflowers and is named after **Theodore Leschenault de la Tour**, who was recruited for the Baudin expedition on the recommendation of the eminent botanist Antoine-Laurent de Jussieu. Leschenault had been studying medicine in Paris, and during his degree had attended lectures on botany at the Museum of Natural History. Leschenault was one of seven botanists and gardeners who set out with the expedition from Le Havre, but in its course rose to prominence as others abandoned it or met their ends. By the time the expedition arrived in Van Diemen's Land in January 1802, Leschenault was its chief botanist by default, and was accompanied by the only surviving gardener, **Antoine Guichenot** (see below).

Antoine Guichenot or Guichenault (1783–1867) was "gardener's boy" on the 1801—1804 French scientific voyage to Australia under Nicolas Baudin, and the 1817 voyage under Louis de Freycinet. Very little is known about him, but the records of Baudin's voyage, together with annotations on surviving plant specimens collected by him, suggest that he was poorly educated, with atrocious spelling and little knowledge of botany, yet worked extremely hard, collecting more plant specimens than the officially appointed botanist, Jean Baptiste Leschenault de la Tour, and, despite his poor literacy, labelling them with much more useful annotations. His contributions to Australian botany are commemorated in the name of the Australian plant genus *Guichenotia*. represented on Rottnest by ***Guichenotia ledifolia***. (Bush Book – Plants of Rottnest Island – page 56).

The Coastal westringia, ***Westringia dampieri***, brings together the names of two major contributors to botanical studies. (Bush Book – Plants of Rottnest Island – page 54). **Johan Peter Westring** (1753–1833), Swedish botanist and lichenologist and physician to the King of Sweden. **William Dampier** (1651 -1715) was an English explorer, privateer, navigator, and naturalist who became the first Englishman to explore parts of what is today Australia, and the first person to circumnavigate the world three times. He has also been described as Australia's first natural historian. His expeditions were the among first to identify and name a number of plants, animals, foods, and cooking techniques for a European audience; being among the first English writers to use words such as avocado, barbecue, and chopsticks. He also has the Pilbara port town of Dampier and the WA plant genus ***Dampiera*** named after him.

After impressing the Admiralty with his book *A New Voyage Round the World*, Dampier was given command of a Royal Navy ship and made important discoveries in western Australia, before being court-martialled for cruelty. On a later voyage he rescued Alexander Selkirk, a former crewmate who may have inspired Daniel Defoe's *Robinson Crusoe*.

Jacques-Julien Houtou de Labillardière (1755 – 1834) was a French biologist noted for his descriptions of the flora of Australia. Labillardière was a member of a voyage in search of the La Pérouse expedition. He published a popular account of his journey and produced the first Flora on the region.



In 1791 Labillardière was appointed as a naturalist to d'Entrecasteaux's expedition to Oceania in search of the lost ships of the comte de La Pérouse. D'Entrecasteaux failed to find any trace of the missing expedition, but his ships visited southwest Australia, Tasmania, the North Island of New Zealand, and the East Indies, where Labillardière, Claude Riche, Étienne Pierre Ventenat assisted by gardener Félix Delahaye collected zoological, botanical and geological specimens, and described the customs and languages of the local Indigenous Australians.

While the expedition was exploring Oceania, the French Revolutionary Wars had broken out, and when the ships reached Java Labillardière's scientific collections were seized by the British as spoils of war. Labillardière despaired at the loss of three years' work, but Joseph Banks, campaigned for the return of the collections. In 1796 lobbying succeeded, and Banks was able to write:

... his Majesty's Ministers have thought it necessary for the honour of the British nation and for the advancement of Science that the right of the Captors to the Collection should be on this occasion wav'd and that the whole should be returned to M. de Billardiere, in order that he may be able to publish his Observations on Natural History in a complete manner ... By this her Majesty will lose an acquisition to her herbarium, which I very much wish'd to see deposited there, but the national character of Great Britain will certainly gain much credit for holding a conduct towards Science and Scientific men liberal in the highest degree.

Labillardière returned to France with his collections in 1796. In 1799 he published a popular account of his voyage, *Relation du Voyage à la Recherche de la Pérouse*, and was elected to the *Académie des sciences*. Between 1804 and 1807 he published *Novae Hollandiae Plantarum Specimen*, the first general description of the flora of Australia. The Nitre bush ***Nitraria billardierei*** reminds us of this act of scientific chivalry and good manners. (Bush Book – Plants of Rottneest Island – page 60).



On 1 November 1794, in Athens, a very talented young field botanist met a tragic death; it was a death that has become enveloped in myth and mystery. His name was **Francesco Borone**, and he was the protegé of the great English patron of botany, Sir James Smith. Four years later Smith fulfilled a promise and named a genus of very beautiful Australian shrubs for him; the flowering of *Boronia* is one of the highlights of spring in many parts of southern Australia.

Originally employed by Smith as a domestic servant, Borone soon showed his interest and intelligence and became a valued botanical field assistant. He accompanied the eminent Swedish botanist Adam Azelius to Sierra Leone then, fatefully, went with the John Sibthorp to Greece to collect for the monumental *Flora Graecae*. Recovering from a bout of fever, he appears to have sleep-walked out of a narrow hotel bedroom window high above the street. Unless Sibthorp and at least two assistants and companions of Borone were in some strange conspiracy - and there is no reason to suppose such a thing - the bizarre accident seems to have been just that. The Winged boronia, *Boronia alata*, is an example of the genus found on Rottnest. (Bush Book – Plants of Rottnest Island – page 66).

<https://www.anbg.gov.au/chah/avh/help/names/index.html>

<https://adb.anu.edu.au/biography/preiss-johann-august-ludwig-2561>

https://de.wikipedia.org/wiki/Heinrich_David_August_Ficinus

https://en.wikipedia.org/wiki/Johann_Olearius

<https://www.openarch.nl/ghn:dfc83dcf-741e-442f-9216-c772233651ec/en>

<http://museum.wa.gov.au/explore/articles/th-odore-leschenault-de-la-tour-botanist-baudin-expedition>

<https://www.britannica.com/biography/William-Dampier>

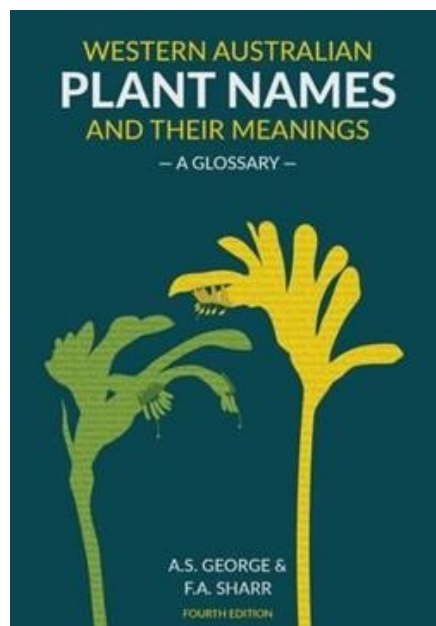
<https://www.eupublishing.com/doi/abs/10.3366/jsbnh.1976.8.1.1?journalCode=jsbnh>

https://en.wikipedia.org/wiki/Antoine_Guichenot

https://en.wikipedia.org/wiki/Jacques_Labillard%C3%A8re

<https://adb.anu.edu.au/biography/la-billardiere-jacquesjulien-houtou-de-2316>

<https://www.abc.net.au/news/2021-09-15/csiro-names-endangered-fly-rupaul-after-celeb-drag-queen-/100462730>



All page references above are to the *Plants of Rottnest*, which is one of the extensive **Bush Book** series. The RVGA launch of the book was at our February 2021 meeting https://wm.rvga.asn.au/wp-content/uploads/2021/03/Gol_2103.pdf

A standard reference on Western Australian plant names is:

Sharr FA 2021. *Western Australian Plant Names and their Meanings - a Glossary*. 4th edition compiled by AS George. Four Gables Press, Kardinya WA.

Check your local library's reference section for this book. Copies can be bought at Aspects Gallery in Kings Park.

https://www.aspectsofkingspark.com.au/products/western-australian-plant-names-and-their-meanings-1?_pos=1&_sid=48e6eb380&_ss=r&variant=40327113310365

Also don't overlook the many stories and updates on the Plant Life of Rottneest and the Herbarium Tales on our website as you explore further.



Guides, Lucy Mandyczewsky and Rose Chaney, at Pink Lake in November 2017, sampling the “long-lost” plant ***Hemichroa pentandra*** which was last collected here in 1956. Thanks to Guide, Jon Dodd, for his editorial support in preparing this Virtual Visit.