



Society for Growing Australian Plants Cairns Branch

NEWSLETTER

Newsletter No 249

April, 2025

President Stuart Worboys
Vice President Rob Jago
Secretary Helen Lawie
Secretary@sgapcairns.org.au

Treasurer Val Carnie
Webmaster Tony Roberts
Librarian Coralie Stuart
Newsletter Editor Pauline Lawie
lawiepm@gmail.com



SGAP Cairns Branch - Outing Sunday 20 April, 2025. Emerald Creek Falls

Meet at Emerald Creek Falls car park at midday for lunch. From here it's a gentle walk up the hill to the falls themselves (or should we call them cascades). There will be plenty of opportunities for botanising along the way.



Stories from the Collection of The Australian Tropical Herbarium Stuart Worboys

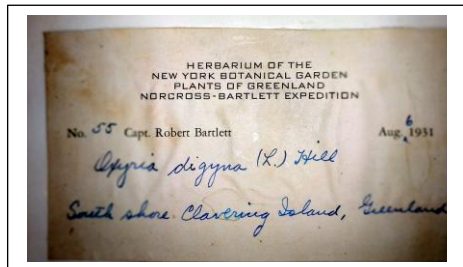
Specimen No. QRS 37597, *Oxyria digyna*, contains over 180,000 pressed, dried specimens. These are an invaluable scientific resource used by researchers from around the world. Each specimen has a story - the how, why, and when it was collected. Here is the story of just one specimen.

Half the ATH's collection originated in the Wet Tropics, another 19% from Cape York. The remainder were sourced from every Australian state, and countries around the world. We have collections from places as far apart as Hawaii, Sweden, Bolivia, Congo... and Greenland.

Our eight Greenland collections originated from a scientific expedition captained by Newfoundland born American Arctic explorer, Robert Abram Bartlett, born 1875, died 1946. His Wikipedia page paints an heroic portrait: he captained the ship that took Robert Peary on his North Pole expedition and was the first person to sail north of 88° N. In 1914 he trekked 1,100 km across frozen Arctic seas and Siberia to seek help in rescuing his companions marooned on Wrangel Island. In the 1930s he commanded his own schooner, the Effie M Morrissey, leading scientific expeditions sponsored by various scientific organisations.

August 1931 found him on Clavering Island, just 2,400 km from the North Pole, on the east coast of Greenland on an expedition sponsored, in part, by the Smithsonian Institution and the

New York Botanical Gardens. The expedition collected bird specimens, narwhal, seals, and undertook oceanographic, hydrographic and meteorological work for the United States Navy. They also gathered flowering plants for the Botanical Gardens.



Clavering Island's flora comprises cold-tolerant herbs and prostrate

shrubs. Bartlett, or one of his crew, collected specimens of the local flora, including a red-leaved herb called *Oxyria digyna* (mountain sorrel), a member of the rhubarb family common across the Arctic. The specimen, wrinkled and brown, made its way around the world to form part of the North Queensland Naturalist Club collections, and ultimately, it's now part of the ATH.

Plant Classification

Plant identification is the process of matching a specimen of a plant to a known taxon, or “Putting a name on a plant”. Humans like to categorise things, pigeon-hole them, plants included. This makes identification easier, so that information about particular plant species can be communicated easily and accurately. Early plant taxonomy grouped plants using criteria very different from that we use today. Plants were grouped on how they were used (medicinal, food, etc.) and on their form (tree, shrub, herb, vine, etc.).

It wasn't until the late 16th century that this changed and authors such as Caspar Bauhin (1560–1624) and Andrea Cesalpino (1524 or 1525–1603) started using a plant's physical characteristics for identification. Cesalpino for example based his classification system on the structure of the reproductive organs.

Species Plantarum (1753) by Linnaeus was one of the most influential publications in the field. It classified all the known European species

based on the number and arrangement of the male and female sexual organs of the plants. The Linnaeus “genus” grouping is still used today. *Species Plantarum* was a useful tool for plant identification, but as it was an “artificial system” based emphatically on numbers of plant features, it could not reflect evolutionary relationships among species.

Charles Darwin's *Origin of Species* (1859) changed this. Botanists started trying to group plants by their phylogenetic or evolutionary relationships: a “natural system”.

While scientists long agreed that a plant classification system must reflect actual evolutionary processes and genetic relationships, they did not have the full set of tools to accomplish this until, in the 1990s, DNA technology was developed enough to be used in the estimation of plant evolutionary history.

In 1998 the Angiosperm Phylogeny Group, an informal international group of systemic botanists, published their first article, making angiosperms the first large group of organisms to be systematically re-classified primarily on the basis of genetic characteristics. All of the groups, families, genera and species consisted of all of the descendants of a common ancestor. Finally the plant naming system truly reflected relatedness and ancestry. Three revisions have been published over the years since, adding more species to, and refining, the classification system. The work of the group is documented at the [Angiosperm Phylogeny Website](#).

The almost 400,000 species of plants identified today are named using an hierarchical system. They are grouped according to their relatedness. Closely related species are placed into the same genus, closely related genera are placed into the same family, closely related families are placed into the same order and so on up to the kingdom level.

This system is useful because it is predictive. If two plants belong to the same group, you know that they share certain features and they are evolutionarily related. This is of particular

importance, for example, when looking for new drugs or estimating the edibility of fruit. All plants are given a two-word name or binomial, the genus it belongs to, followed by its species name. All binomials in the plant kingdom are unique.

There are only about 750 to 800 families of plants. They contain from 1 to about 25,000 species. Plants in the same family share many physical and genetic characters, for example palms have unbranched woody stems (with rare exceptions), spirally arranged leaves, sessile flowers and large-seeded drupaceous fruits.

Botanical science is always advancing, and our knowledge of the relationships between plants is therefore constantly evolving. To the layperson, the name changes that result from this work can be painfully confusing. But accept these changes, knowing that they reflect a better understanding of the natural world.

Queensland Region Name Change

The Queensland Region held its Annual General Meeting on 15 March. A special resolution was passed that officially changes the name of the Society from Society for Growing Australian Plants (Queensland Region) Inc to Native Plants Queensland Inc. Clause 1 of the organisation's constitution has been amended to reflect the change.

Queensland Region office bearers are:

President - Julie Nimmo
 Vice President - Neil Hoy
 Vice President - Bob Bannon
 Secretary - Paul Taylor
 Treasurer - No nomination

They are now awaiting approval of the name change from the Office of Fair Trading; it's not just plants that are retaxed!

Branch fees of \$10 are now due
 BSB 034 167 account no 850790

From Patsy Penny

On one of our trips to High Island in the Frankland Group NP, we found what we thought was a Wongai tree, *Manilkara kauki*. Having spent a former life in the Torres Strait, and some time in Cape Melville NP, we thought we knew what they looked like.



However, when we scratched a fallen seed, it looked different. Once we came home and consulted our books we found it was a Coastal Boodyarra, *Aglaia elaeagnoides*.

The seed inside the flesh was patterned like the Channel Country in the wet. Very pretty !



Right beside this beautiful tree we found several flowering and fruiting Sea Hearse, *Hernandia nymphaeifolia*. These have interesting leaves which are oval with a

tapering point. The black seed is sheathed in a smooth cream globe resembling a light shade hence its other common name Lantern tree.



Both of these trees are found in Northern Australia along beaches, rocky shorelines and beach forests.