

PLANTS: THE SILENT MAJORITY

Despite the fact that Western Australia is known as the Wildflower State, and that our spectacular displays of wildflowers are a major tourist attraction, I am uncomfortably aware that we give our plants much less attention than our native animals. I suppose it is inevitable that static objects don't provide good vision in an age when so much communication comes through a TV tube.

The same is true of animals, though only up to a point. We usually know the charismatic ones, such as the dolphin or numbat, and know hardly anything about the starfish or the myriad groups of invertebrates (see 'Starfish, Urchins and Their Relatives' on p.10). But most denizens of the plant world, certainly the populations under threat, live and die silently and invisibly beyond our awareness. Many of the areas in which they live seem, at first glance, so uninviting; yet these habitats are bursting with life from all of the five biotic kingdoms.

I must confess that when I did my botany training, my tutor of the day (as it happens, the author of 'From Here to Eternity' on p.43 of this issue) did not rate me highly as a taxonomic scholar. But despite my inadequacies as a taxonomist, I have always been fascinated by plants and I envy the ability of people like those staff and volunteers who work in CALM's WA Herbarium.

The knowledge unearthed by such people, though nowhere near complete, is vast. And we can now ensure that vital information on biodiversity is instantly available to conservation scientists, because we have at last computerised what we already know of the vast and diverse vascular plant flora. The way is clear to begin documenting all of WA's biodiversity using modern technology. This will be used to great advantage to underpin the conservation effort of our State.

Plant science may soon regain the prestige it enjoyed in the nineteenth century, because of the increasing role that plants could play in providing new chemicals to combat modern human diseases. Western Australia is particularly well placed to capitalise on this relatively new industry. The conditions that have shaped our unique flora—infertile soils, bizarre climatic regimes and isolation—have forced them to develop unique chemicals.

It's also important that there is increased community interest and appreciation of value of our flora because of the threat that it faces. Native animal species in Western Australia have suffered badly because of human activities, but the threat to many of our unique plant species is even greater.

Over the next year we hope to initiate a number of new strategies to protect our flora. But as always the key to achieving long-term success with conservation programs is to generate community support. Just as we are linking our native animals conservation program with nature-based tourism, similarly we hope to devise new ways for the community to enjoy and value our unique flora.

*Aya Alsea*

The Publisher

NINETEENTH-CENTURY PLANT SPECIMENS RETURNED TO WA



Duplicates of plant specimens collected in the south-west early last century have been returned to WA in the first stage of a unique exchange program between CALM's WA Herbarium in South Perth and the Herbarium of Paris, France.

The specimens were collected during the first few decades of the Swan River Colony by French, English and German scientists, attracted by the incredibly diverse flora of Western Australia.

Apart from their historical interest, the specimens help botanists to correctly apply the scientific names given to WA plants last century, and are key elements in the WA Herbarium's plan to build a comprehensive inventory of the State's plants.

According to Senior Principal Research Scientist, Dr Neville Marchant, the early European scientists collected WA seeds and plant specimens and then sent them back to herbaria in Europe, where they were used to describe new species.

"They are called 'type' specimens and are critical to the ongoing study of WA

plant classification," he said. "CALM's WA Herbarium has type specimens for species named after the 1920s, but the older material is not readily available. We developed the exchange idea to overcome this problem."

In return for duplicates from some of the early collections, the WA Herbarium sends its latest specimens, appropriately computer-barcoded, to Paris.

"It's an excellent exchange," Dr Marchant said.

Some of the century-old specimen duplicates winging their way back to Western Australia come from the collections of botanists such as James Drummond, who arrived in 1829 to document the botanical wealth of his new home, and Prussian scientist Ludwig Preiss, who arrived for a three-year visit in 1839 and collected vast amounts of scientific material to send overseas.

*Above: Dr Neville Marchant inspects Guichenotia ledifolia, a member of the Kurralong family. It was collected in the south-west by Ferdinand von Mueller in 1863.*

*Photo - Verna Costello*

# LANDSCOPE

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'Conserving the western ringtail possum' tells a story of rehabilitation, release and repopulation.



Discover the fascinating world of 'Starfish, Urchins and their Relatives' on page 10.



'The Art of Interpretation' on page 36 discusses how interpreters use a variety of techniques to enrich our experiences.



What have rabbits done to our land and what have we done about them? Find out in 'Run, Rabbit' on page 49.



Learn about a study of life in the tropical mudflats of Roebuck Bay on page 16.

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Computers and the Internet are putting CALM's Western Australian Herbarium within easy reach of researchers, students and wildflower enthusiasts. See 'From Here to Eternity' on page 40.

Illustration by Philippa Nikulinsky



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