A DAISY BY ANY OTHER NAME...

Actinodium calocephalum *(left) and* A. cunninghamii *(right). Illustration - courtesy WA Herbarium*

When is a daisy not a daisy? In the State's South-West, botanists were presented with just that question when it appeared there were two different species of the Albany daisy, and three scientific names.

The Albany daisy, a member of the eucalyptus and bottlebrush family Myrtaceae, has puzzled botanists for nearly 200 years. It was first collected by botanist Robert Brown in 1802 from King George Sound, the site of present-day Albany. Pressed and dried, the Albany daisy was sent to many of the large herbaria of Europe.

The Albany daisy was officially named *Actinodium cunninghamii* in 1835 by an Austrian botanist. Two years later, another specimen of the same species was named *Triphelia brunioides* by Robert Brown, who was unaware of the earlier publication of *Actinodium cunninghamii*. In 1849, to compound the confusion Russian botanist Nicholas Turczaninov believed he had a species different from *Actinodium cunninghamii* and published the name *Actinodium proliferum*. Turczaninov was unaware of the name *Triphelia brunioides*, and also unaware he was putting a third name to the Albany daisy.

Meanwhile, back in Western Australia, the puzzle continued when colonial botanist James Drummond noted a different type of Albany daisy. In a letter to the director at Kew, Drummond said he recognised a new species of *Actinodium* and sent a pressed specimen. Botanists at Kew displayed Drummond's find with specimens of the original *Actinodium cunninghamii*.

How many types of Albany daisy could there be? At CALM's Western Australian Herbarium, taxonomic research (the study of classifications of species) found the answer. CALM botanists Neville Marchant and Greg Keighery observed a great deal of variation in the specimen folders of *Actinodium* at Perth. Greg Keighery discovered what he thought was a new species - could there be yet another type of Albany daisy?

Granted a Churchill fellowship to study original Western Australian collections in Russia, Neville Marchant had a chance to see the original gathering of Drummond's Albany daisy in the collection of Nicholas Turczaninov in Kiev. This was the species Turczaninov had named *Actinodium proliferum*. Neville found this similar to the presumed new species Greg Keighery had discovered and the same as the one described as *Actinodium cunninghamii* by the Austrian botanist in 1835.

Neville's and Greg's taxonomic research revealed that in fact there are two species of Albany daisy: the original *Actinodium cunninghamii*, which flowers in summer and occurs from Albany west to Busselton; and a second species which has remained unrecognised since its original discovery by James Drummond in 1849. Soon to be named *Actinodium calocephalum*, this species flowers in the spring and occurs from Albany east to the Young River.

So if you go to Albany to view the wildflowers, look in moist localities for a flower with creamy white radiating petal-like structures that lie in a pink-centred, flat-topped cluster. Like many Western Australian wildflowers, the flowers themselves are small, but are aggregated into heads from 30 to 45 cm in diameter. But don't be confused when you see lots of variations in size and shape!

CHANGING SPOTS

This leopard seal (*Hydrurga leptonyx*) seen at Lancelin this month is one of the more unusual visitors to our coast.

The seals are normally found in sub-Antarctic and Antarctic regions, but in late winter and early spring they are sometimes seen along the southern Australian coast. Six leopard seals have been stranded on the WA coast since August this year.

The animals have a long slim body and a disproportionately large, reptilian-looking head.

They are carnivorous and feed on several species of penguins and other birds, such as giant petrels, as well as young crabeater, weddel and elephant seals, and krill.

Wildlife Officer Doug Coughran said that when there was a stranding, officers from the Department of Conservation and Land Management set up a barricade tape to protect both people and the animal.

"We monitor the animal's condition and call a vet if required," he said, "but they usually just need to rest up until they are ready to return to the sea."

Photo - Doug Coughran

In the central Kimberley, a screw-pine-surrounded creek - just one of the threatened areas in this fragile frontier. Turn to page 22.

LANDSCOPE

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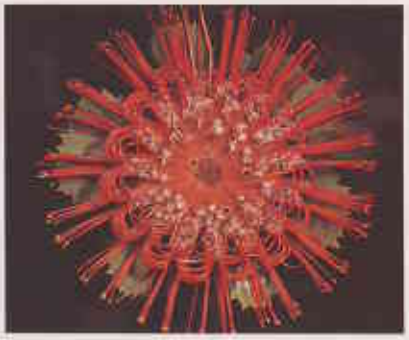

Public awareness and involvement is vital in the conservation of WA's rare and endangered flora. Page 49.

Ten WA mammal species have become extinct in the last 200 years. What can be done to ensure no more are lost forever? Page 28.

Until 1984 more was known about what was underneath the Nullarbor than what was on top. But with such a vast area to study, where do we start? See page 16.

Forests protect our environment. They also provide timber. How do we strike a balance? Turn to page 35.

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COVER

Dolphins and whales are perhaps the best-known inhabitants of Western Australia's coastal waters. But this unique area is also home to an astonishing range of marine flora and fauna, from sea-turtles and coral reefs in the north to sea-grass banks and great white sharks in the south. See page 10.

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