



# ENDANGERED!



THE SWAMP STARFLOWER: *CALYTRIX BREVISETA* SUBSP. *BREVISETA*

In 1837, Captain James Mangles left the Swan River Colony in Western Australia bound for England. On board his ship, the *Hero*, was a collection of plant specimens from James Drummond, the State's first Government Botanist. In 1839 John Lindley, Professor of Botany at London's University College, named two specimens, including one collected by Drummond, as *Calytrix breviseta*.

In 1987, a subspecies of the starflower *Calytrix breviseta* was recognised and named as the subspecies *stipulosa*. As a result the typical *Calytrix breviseta*, or swamp starflower, became known as *Calytrix breviseta* subsp. *breviseta*. It is distinguished from the other subspecies (*stipulosa*) by its longer, linear leaves and longer petals.

The swamp starflower forms an attractive erect or spreading shrub up to about 40 cm tall. Purple flowers

with numerous stamens are scattered along the branchlets. It is found growing in winter-wet depressions in low heath of featherflowers (*Verticordia acerosa* and *V. plumosa*).

Since the original collections, only a few specimens of the swamp starflower were known to exist, with the last herbarium collection made in 1915. It had been presumed extinct with the likelihood of its rediscovery seeming remote - the known plant sites were from Perth suburbs that have since been largely cleared.

In November 1990, Anne Kelly and Amanda Spooner, consultant botanists with the Flora Conservation Research Program of the Department of Conservation and Land Management (CALM), discovered a population of the plant on private land in one of Perth's eastern suburbs.

In 1991, the swamp starflower was gazetted as "declared rare flora" and a management strategy was

drawn up by CALM to protect it. This involves liaising with the landowners, monitoring the site annually, collecting of seed for long-term storage and, if possible, acquiring the site as a conservation reserve.

The dieback disease caused by *Phytophthora cinnamomi* has since been identified at the site and its long-term ecological impact on the starflower could be significant.

Further surveys in similar areas may reveal other populations, and the development of propagation techniques may allow the cultivation of the swamp starflower. In these ways we may be fortunate to see more of this rare and attractive plant.

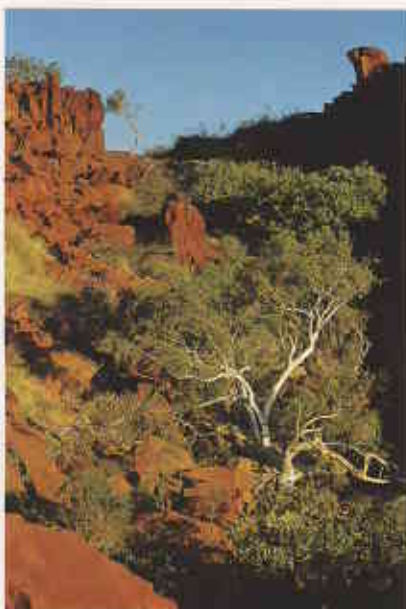
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by Suzanne Curry  
and Anne Kelly  
Photo - David Coates

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# LANDSCOPE

VOLUME EIGHT NO. 4 WINTER ISSUE 1993



Nature-based tourism is a rapidly-growing industry and WA is poised to take a slice of that growth. See 'Our Natural Advantage' on page 10.



Frogs can be an interesting addition to any suburban native garden. Grant Wardell-Johnson describes how to attract them to your garden on page 16.



'Seagrass, Surf and Sea Lions' (page 21) are just some of the features of a string of islands that dot the WA coastline north of Lancelin.



Forrestdale Lake is an 'Outer City Sanctuary' for thousands of visiting and resident waterbirds. See page 35.



When is a flower not a flower? Neville Marchant, from CALM's WA Herbarium unravels the intricacies of the State's many 'False Flowers' on page 39.

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## COVER

The bull frog (*Litoria moorei*) is very large and has a voracious appetite. It is a frequent visitor to gardens and may be found particularly in greenhouses, ferneries and wet areas such as streams and ponds.

The illustration is by Philippa Nikulinsky, inspired by a Peter Marsack photograph, courtesy of Lochman Transparencies.



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Colour Separation by Prepress Services

Printed in Western Australia by Lamb Print

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Published by Dr S Shea, Executive Director  
Department of Conservation and Land Management,  
50 Hayman Road, Como, Western Australia 6152.