

PRESUMED EXTINCT

In April 1895, Spencer le Marchant Moore collected a mauve-flowered *Hemigenia*, which he later named *Hemigenia exilis*.

Moore, an Englishman who had worked at Kew Herbarium and, later, the British Museum, came to Western Australia with a gold-seeking expedition attempting to find its fortune between Southern Cross and Lake Darlot. Moore camped at a creek "where there was plenty of water" while the remainder of the party pressed on towards Darlot. He stayed at the creek for about three weeks and, during that time, collected and pressed several plants, many of which he later described as new species. Among them was *Hemigenia exilis*.

The only known record in Australia of this discovery is held at the Department of Conservation and Land Management's (CALM) WA Herbarium. It comprises a photograph of the type specimen held at the British Museum and a photocopy of the original description by Moore. This is the only

collection known of the species and was listed by CALM as "presumed extinct".

In August 1995, Anaconda Nickel NL commissioned botanists from Matiske Consulting Pty Ltd to undertake the first of a number of vegetation surveys on their leases. During the first survey, which was carried out on leases near Leonora, the botanists collected a mauve-flowered shrub, which they did not recognise. Back at the office, a Matiske botanist identified it as the 'presumed extinct' species, *Hemigenia exilis*. At the WA Herbarium, the botanist compared the plant from Leonora with the photograph of the type specimen, and although she was certain it was *Hemigenia exilis*, the collection was left and confirmed a few days later by a WA Herbarium botanist.

After arranging for the appropriate rare flora collecting permits, a further five-day survey was carried out to determine the total occurrence of this important plant species on the company's leases.



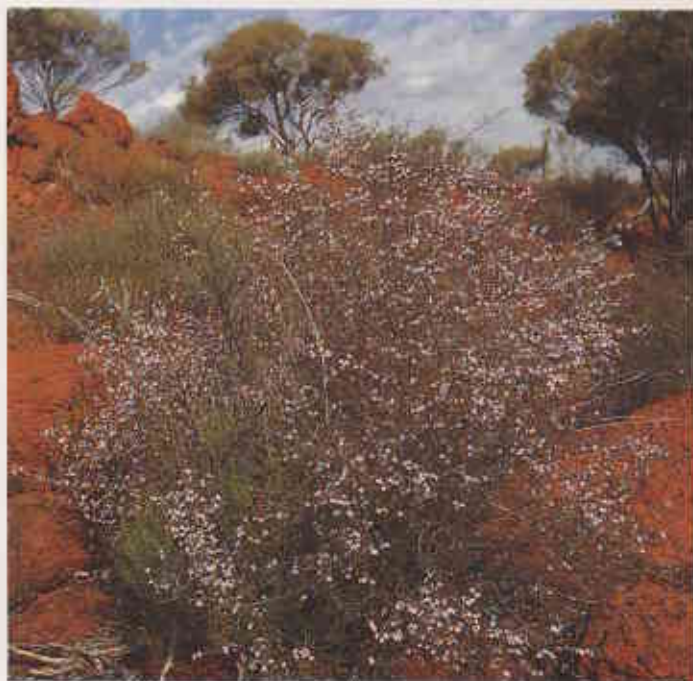
Specimens were collected and mapped, and the plant's distribution flagged. It was found to be quite abundant at six locations. Collections of cuttings were sent to Kings Park and Botanic Garden for research into the propagation and eventual inclusion of *Hemigenia exilis* in its Rare and Endangered Garden.

A further location was found by one of Anaconda's geologists, so the company commissioned another survey to selectively search similar soil types between Leonora and Lake Darlot. However, as permission could not be obtained from all the pastoral companies on the company's leases, not all the potential areas were searched. No further locations were found during this search, but field staff from Anaconda later found an additional 21 populations on pastoral properties or mining leases. Unfortunately, none was found on a reserve. Identification of all the populations located was confirmed and it is now estimated that there are 4 500 plants of this species.

In November 1995, a Matiske botanist, together with one of Anaconda's biologists, was commissioned to collect seed from the then eight known populations. This is a long and tedious task, as there is a maximum of four seeds per fruit, and CALM's Threatened Flora Seed Centre

Top: Close-up of a delicate bloom of *Hemigenia exilis*.

Left: *Hemigenia exilis*, the shrub found near Leonora.  
Photos - Eleanor Bennett



(see *Banking for the Future*, *LANDSCOPE*, Winter 1996) had requested 1 000 seeds per plant from up to a maximum of 10 plants per population. Samples were collected by shaking the plants and collecting the seed that fell onto a sheet under the shrub, or, where the seed was not as mature, by selectively collecting as much mature fruit as possible.

A twiggy shrub, *Hemigenia exilis* is about one to one-and-

a-half metres tall with opposite branches and opposite linear leaves. The flowers are mauve to white and, when in full flower, completely cover the shrub. The species typically occurs in rocky soil, often dense laterite, and along drainage lines.

As 1995 had been an exceptionally wet year on the Goldfields, it was thought this may have stimulated flowering, which, in turn, led to its ready recognition and subsequent

rediscovery. After further discussions, Anaconda Nickel NL decided to fund further monitoring of the flowering and growth patterns. This monitoring has been undertaken on tagged plants at monthly intervals since December 1995.

*Hemigenia exilis* is a very beautiful plant, worthy of growing in the home garden. Although it is not known yet if it will survive in Perth, it certainly has the potential to

become an excellent garden plant in the Goldfields. But before this can happen, the seed germination and seedling growth have to be known, and any other methods of propagation, such as the use of cuttings, need to be understood.

Research into this spectacular plant is still continuing, thanks to the interest and funding support provided by the Directors of Anaconda Nickel NL.

## <http://www.calm.wa.gov.au>

*LANDSCOPE* has joined the information super highway as part of the Department of Conservation and Land Management's new website, 'NatureBase'.

With 'LANDSCOPE Online', you can see details of the current issue as well as what's coming up in the next, and it's also possible to send letters to the Editor through the e-mail service.

But 'LANDSCOPE Online' is only one of nine main subject areas on CALM's new website. Other areas include 'About CALM', 'Projects', 'Forest Facts', 'National Parks', 'Nature-based Tourism' and 'Latest News', and viewers can browse the site, download and print information, search for specific information, send comments and e-mails and register with the site.

'About CALM' gives information about the department and lists its regional and district offices' addresses and contact phone and fax numbers.

New initiatives, such as Western Shield, can be found under the 'Projects' heading, while 'Forest Facts' gives the low-down on the State's forest management.

Under 'National Parks' you will find a region-based quick reference guide to recreation

facilities in CALM-managed parks, reserves and State forest areas, as well as our regular 'Park of the Month' feature.

'Latest News' provides summary of the department's media releases, together with full text, downloadable versions. This area is updated daily, if required, and will soon include an on-line daily news service.

In 'Nature-based Tourism' you can find out about *LANDSCOPE Expeditions*, the

Ibis Aerial Highway and the Geikie Gorge boat tours.

There is also an area specifically for schools. Here, teachers and students can obtain information on a wide range of educational programs and activities, as well as downloading student activity packs and resource notes.

CALM's full range of publications can be viewed, chosen and ordered in the 'Bookshop' area, and you can even subscribe to *LANDSCOPE*.

*NatureBase* became live on Friday 21 June with more than 60 pages of information.

The site was designed, written and constructed by CALM's Corporate Relations Division in conjunction with WA company Dow Digital. More pages are being added regularly, so bookmark our internet address (see title bar) and visit us soon.

*Screen dump of NatureBase, as viewed in Netscape.*



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VOLUME TWELVE NUMBER 1, SPRING 1996



*Rainbow lorikeets. Are they pests? Will they displace our native birds? Do we need to control their numbers, and if so, how? Find out more on page 17.*



*A subspecies of granny bonnets (Isotropis cuneifolia subsp. glabra) found in a threatened community on the Swan Coastal Plain. See story on page 35.*



*'The Magic of Magenta' co-author Mal Graham clearing an Aboriginal soak in Lake Magenta Nature Reserve. See our story on page 41.*



*A rat by any other name...? In 'Dinkum Aussie Rats' Andrew Burbidge discusses the use of common and Aboriginal names for native rodents.*



*In 'Saving the Giants', read how a new Tree Top Walk in WA's south-west is set to become one of Australia's nature-based tourism icons.*

## FEATURES

<b>SAVING THE GIANTS</b> CLIFF WINFIELD .....	10
<b>RAINBOW LORIKEETS: INVADERS IN THE SUBURBS</b> DAVID LAMONT & ALLAN BURBIDGE .....	17
<b>DINKUM AUSSIE RATS</b> ANDREW BURBIDGE .....	22
<b>SLUGS OF THE SEA</b> KEVIN CRANE .....	28
<b>THREATENED PLANT COMMUNITIES ON THE SWAN COASTAL PLAIN</b> VAL ENGLISH, GREG KEIGHERY & JOHN BLYTH .....	35
<b>THE MAGIC OF MAGENTA</b> MURRAY CARTER, MAL GRAHAM & CHRIS JOHNSON .....	41
<b>CRONINA: A NEW GENUS</b> SUZANNE CURRY .....	48
<b>A BLAST FROM THE PAST</b> ALEX BEVAN .....	50

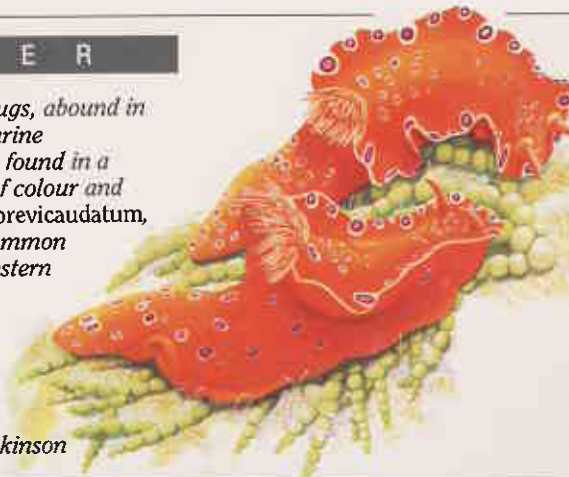
## REGULARS

<b>IN PERSPECTIVE</b> .....	4
<b>BUSH TELEGRAPH</b> .....	6
<b>ENDANGERED: DUNSBOROUGH SPIDER ORCHID</b> .....	47
<b>URBAN ANTICS</b> .....	54

## COVER

*Nudibranchs, or sea-slugs, abound in Western Australia's marine environment. They are found in a tremendous diversity of colour and form, the Ceratosoma brevicaudatum, illustrated here, is a common inhabitant of south-western waters. See page 28 to learn more about the 'Slugs of the Sea'.*

*Illustration by Ian Dickinson*



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