

MILLENNIUM SEEDBANK

Western Australia has been invited to be part of the Royal Botanic Gardens, Kew, UK Millennium Seed Bank Project (MSBP).

The MSBP International Program is a 10-year global conservation program conceived, developed and managed by the Seed Conservation Department at the Royal Botanic Gardens, Kew.

The project aims to collect and conserve 10 per cent of the world's seed-bearing plants, mainly from the world's drylands, by 2010. This represents some 24,000 species. It also aims to develop research, training and capacity building relationships worldwide in order to support and advance seed conservation.

Over the past few years, some 93 per cent of the entire United Kingdom native seed-bearing flora has been collected and conserved in long-term storage.

The British Government's Millennium Commission has provided \$83 million towards the project. More than \$800,000 will be allocated to the Department of Conservation and Land Management (CALM) and the Botanic Gardens & Parks Authority (BGPA) to fund the Western Australian component over the next 10 years.

Seed samples will be collected and placed in long-term secure storage. The seed will be regularly tested to ascertain its viability. If viability drops, seed will be recollected. The stored seeds will be available to use for re-establishing plant species that become extinct in the wild.



Over the next 10 years, CALM's Threatened Flora Seed Centre at the WA Herbarium will collect seeds from 1,000 of WA's least-known species. Seed will be held in long-term storage in both WA and the United Kingdom.

The project will also entail studies within WA involving CALM and the Botanic Gardens & Parks Authority, as well as collaborative research between WA and the Seed Conservation Department of the Royal Botanic Gardens, Kew. The studies will improve the knowledge of germination, storage and how seeds maintain dormancy.

WA is well-placed to play an active role in this important project. CALM's Threatened Flora Seed Centre at the WA Herbarium plays a pivotal role in the State's flora conservation efforts.

CALM and BGPA's collaboration in the Millennium Seed Project will build on WA's expertise in conserving flora in the wild, particularly threatened species, and enhance conservation initiatives such as CALM's Western Everlasting Project and the BGPA's collaborative endangered plant rescue program.

Western Everlasting, initiated two years ago, is a broad-ranging program that aims to reduce the impact of threats such as dieback disease and weeds, and establish new populations of threatened species in suitable habitat.

Using seed banks is a relatively new and under-used tool to combat the loss of global plant diversity. While the emphasis and priority will continue to be maintaining native species in the wild, seed banks are

an important 'insurance policy'.

The loss of biodiversity is of enormous concern, particularly in areas such as WA, where as many as 450 native plant species are at risk because of encroaching salinity in the species-rich Wheatbelt region. About 20 per cent of WA's flora may be susceptible to dieback and also in danger of extinction.

*Millennium Seed Bank Centre Manager Anne Cochrane shows Regelia megacephala seeds collected from Cairn Hill, north of Moora, to Principal Research Scientist David Coates and Principal Research Scientist Margaret Byrne.
Photo – Verna Costello*



Winner of the 1998 Alex Harris Medal for excellence in science and environment reporting.

LANDSCOPE

VOLUME SIXTEEN, NUMBER 3, AUTUMN 2001



Armed with sketch pad, pencils, pens and paints, an intrepid group of artists set off on a brand new LANDSCOPE expedition. See 'Awash with Colour' on page 28.



Most of us only know of the exotic pest ants that invade our kitchens. But what of the great Australian ants? See page 23.



Ningaloo Marine Park and Cape Range National Park lie side by side in our north-west corner. Read about how they are managed on page 17.



Four more conservation reserves now offer greater protection to areas in and around the Mitchell Plateau. See 'Parks of the Plateau' on page 48.



Scientists continue to develop ways to locate, track and trap animals for research. See 'Tools of the Trade' on page 41.

FEATURES

IN PURSUIT OF THE FROG FUNGUS
KEN APLIN AND PETER KIRKPATRICK.....10

RANGE TO REEF
DOUG MYERS.....17

THE GREAT AUSTRALIAN ANT
BRIAN HETERICK.....23

AWASH WITH COLOUR
SUE PATRICK.....28

RAIL AGAINST TIME
GEORGE DUXBURY.....37

TOOLS OF THE TRADE
TONY FRIEND.....41

PARKS OF THE PLATEAU
CHRIS DONE.....48

REGULARS

BUSH TELEGRAPH.....4

ENDANGERED
GREEN HILL THOMASIA.....36

URBAN ANTICS
A PRIMITIVE THYSANURAN.....54

Executive Editor: Ron Kawalilak
Editors: David Gough and Carolyn Thomson-Dans
Bush Telegraph Editor: Verna Costello
Advertising copy and editorial assistance: Caris Bailey
Scientific/technical advice: Andrew Burbidge, Chris Simpson, Paul Jones and staff of CALMScience Division
Design and production: Tiffany Aberin, Maria Duthie, Gooitzen van der Meer
Illustration: Gooitzen van der Meer
Cartography: Promaco Geodraft
Marketing: Estelle de San Miguel ☎ (08) 9334 0296 Fax: (08) 9334 0498
Subscription enquiries: ☎ (08) 9334 0481 or (08) 9334 0437
 Colour Separation by Colourbox Digital
 Printed in Western Australia by Lamb Print
 © ISSN 0815-4465. All material copyright. No part of the contents of the publication may be reproduced without the consent of the publishers.
 Please do not send unsolicited material to LANDSCOPE, but feel free to telephone the Editor.
 Visit NatureBase at <http://www.naturebase.net>

COVER

For many years, the decline of frogs in various parts of the world has puzzled conservationists. A breakthrough came in 1996 when scientists isolated a new kind of fungus that infects and may kill frogs. Western Australian research now under way is beginning to answer some initial questions about the fungus and its impact on our unique frogs. See 'In Pursuit of the Frog Fungus' on page 10.

Cover illustration by Philippa Nikulinski



Published by the Department of Conservation and Land Management, Dick Perry Avenue, Kensington, Western Australia

