PREDATORS PIPPED AT THE POND

What do you do when a vermin-proof fence, built to protect a colony of long-necked tortoises from predators, appears to impede their migrating habits? One solution—and one that appears to be succeeding at Thomsons Lake—is to build small ponds set directly below and on both sides of the cyclone fence at locations where tortoises are known to gather. The protected entry and exit points built into and out of the ponds are inaccessible to predators, and the tortoises, sensing the existence of water below, can make their way to the other side in safety.

Department of Conservation and Land Management (CALM) staff Rod Martyn and Lyndon Mutter designed the ponds, on the advice of University of Western Australia research scientist Gerald Kuchling. The next step was taken by CALM overseer Glyn Hughes, who built a concrete prototype pond.

Rod Martyn, shows the pond with cover removed.
Photo - Roger Markham

Rod designed an improvement on the prototype, using fibreglass instead of concrete, and installing slide-in entries and exits through the protective lid.

The movement of the tortoises had not been occurring consistently, nor in significant numbers, and is believed to be associated with females moving long distances to lay eggs in spring and early summer. Others may have been trying to migrate between wetlands last summer when Thomsons Lake had dried to a significant degree, with some tortoises dehydrating and dying along the inside of the fence. Only a small percentage are believed to have migrated from the reserve, with most burying themselves under the mud in the lake as the surface dried.

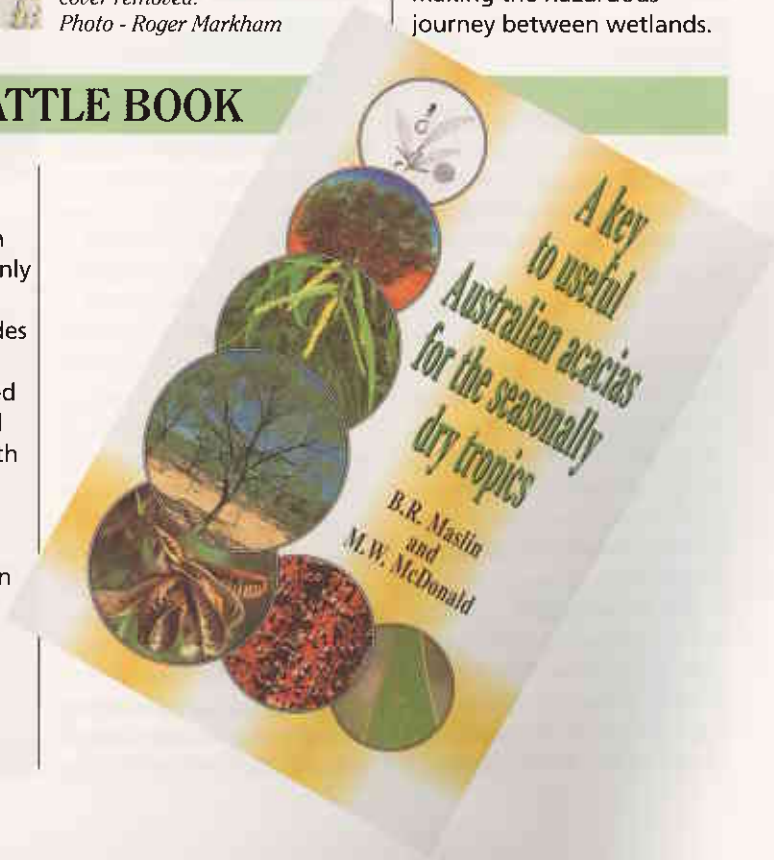
The ponds, however, soon proved to be well patronised. At one stage, five tortoises were counted, apparently rehydrating before moving on through the protected exits.

While the vermin-proof fence impeded movement of some tortoises, its overall benefit to the population has outweighed any disadvantages. Before construction of the fence, many migrating and nesting tortoises fell victim to foxes or cats, and freshly killed tortoises were often seen with their heads bitten off, probably by these predators.

The long-necked, or oblong, tortoise (*Chelodina oblonga*) is common in freshwater wetlands of the Swan Coastal Plain. It is carnivorous, feeding on fish, molluscs and crustaceans, and lays clutches of up to 25 eggs hatching in August and September, many of which are taken by foxes. Those hatchlings that are not taken may later perish when making the hazardous journey between wetlands.

NEW WATTLE BOOK

Acacia species from the seasonally dry and humid tropics of Australia are used in 74 countries and cover almost two million hectares in plantations. Many of these species have the potential to meet demand for fast-growing, renewable resources of wood and other products and are currently being used in commercial, social and environmental applications abroad. A recent CALM-CSIRO collaborative research project resulted in a publication: *A Key to useful Australian Acacias for the Seasonally Dry Tropics*, co-authored by CALM senior research scientist Bruce Maslin and CSIRO botanist Maurice MacDonald, which lists 31 of the most commonly planted Australian tropical acacias. The key also provides a botanical description for each species, complemented by colour photographs and line drawings, together with information on related species and hybrids. The project received funding support from the Australian Agency for International Development and the United Nations UNDP/FAO FORTIP project in Asia.
(See "Australia's Golden Future" in this issue.)



Aquatic bugs are helping scientists to determine the health of WA's waterways. See Spineless Indicators on page 49.

LANDSCOPE

VOLUME TWELVE NUMBER 3, AUTUMN 1997

CALM's new Marine Conservation Branch gets in deep (page 10) to play its vital role in safeguarding the health of WA's unique marine environment.

Called 'Karlamilyi' by desert Aborigines, Rudall River National Park (page 28) is steeped in history and bristling with wildlife.

The economic, social and conservation potential of Acacia in WA , a story of a golden future on page 16.

Fancy a walk? Join us while we look at the environment, history and building of a new Bibbulmun Track. See page 36.

FEATURES

REGULARS

COVER

The tiny pebble-mound mouse of the Pilbara (see story on page 42) is a tireless night-worker and the architect of many odd, red gravelly mounds, which look like miniture volcanoes among spinifex.

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Colour Separation by Prepress Services
Printed in Western Australia by Lamb Print

Visit *LANDSCOPE* Online on our award-winning Internet site *NatureBase* at http://www.calm.wa.gov.au/
Published by Dr S Shea, Executive Director
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50 Hayman Road, Como, Western Australia