

HATCHLINGS STICK THEIR NECKS OUT

THE fight to save Australia's rarest animal from extinction received a major boost when 11 western swamp tortoises were hatched at the Perth Zoo recently.

The western swamp tortoise, or short-necked tortoise, lives only in two small nature reserves in the Upper Swan-Bullsbrook area in Western Australia.

It was discovered in 1839, when a single specimen was collected and sent to the museum in Vienna, Austria. No more were seen for over 100 years and the species was feared extinct. Then, in 1953, a boy found one crossing Warbrook Road, Upper Swan.

Even at the time of European settlement, the tortoises occurred in a very specialised habitat in a very small area that was among the earliest land developed for agriculture in the State. Introduced foxes have also taken a heavy toll on the tortoises.

Research indicates that there are now less than 30 tortoises on the two reserves and captive breeding is probably the only hope of preventing their extinction.

Captive breeding experiments carried out by the Department of Conservation and Land Management (CALM) in the late 1970s and early 1980s had limited success and it was clear that a more concerted effort was needed.

CALM organised a new captive breeding project last year, funded by the World Wildlife Fund Australia, the Australian National Parks and Wildlife Service, CALM and Perth Zoo.

The project is being carried out by Dr Gerald Kuchling from the University of Western Australia, who is a world authority on tortoise and turtle reproductive physiology.



Tortoises at Perth Zoo were moved to new breeding enclosures and fed a special diet.

Ultra-sound scanning of the tortoises revealed that three old females collected about 30 years ago were still capable of breeding. Female reproductive status is now regularly monitored by ultra-sound scanning, enabling Dr Kuchling to watch egg development and work out when egg-laying will occur.

Twelve eggs were laid between October and December last year and some of these were incubated artificially. Eleven eggs hatched between February and April and all hatchlings are now feeding and growing well. Their hatching increased the total size of the population by over 25 per cent.

It may be 15 years before the project can be judged a total success, because the ultimate aim is to raise the hatchlings to maturity and breed from them. Only then will releases into the wild be considered.

Other constraints must also be taken into account. These include:

- the lack of sufficient suitable habitat to sustain a large population;
- predation by introduced foxes, feral dogs and cats;
- the risk to the long term

Everyone loves a baby, but this one, one of less than 50 of its kind, is extra special.
Photo-Gerald Kuchling

genetic health of the species because of the necessity to breed from such a small group.

The situation in the wild must be substantially improved. It will be necessary to secure existing reserves from perils such as introduced predators, frequent fires, and lowering of the water table. To re-establish a viable population in the wild, it may even be necessary to recreate lost western swamp tortoise habitat on land near existing reserves.

NEW NATIONAL PARK

WESTERN Australia's and the world's largest rock will soon become a national park.

Mount Augustus, located north-east of Gascoyne Junction, is twice the size of Ayers Rock. The rock is 1000 m high and provides spectacular views.



The owners of two nearby stations surrendered sections of their pastoral leases to incorporate them into the new Park.

Photo-Cliff Winfield

The 9200 ha Mount Augustus National Park is about five times the size of Rottneest Island, and has great beauty and cultural significance. The local Aboriginal community will be involved in the Park's management.

BOOK REVIEW

ADVENTURE...something we all yearn for in our lives, yet seldom find - until

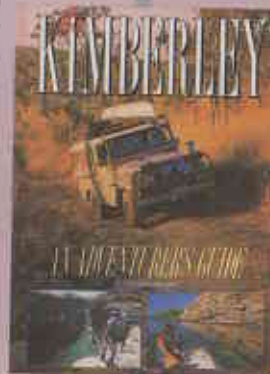
now. The answer lies in Ron and Viv Moon's latest book *The Kimberley - An Adventurer's Guide* featuring natural and historical information on the region's major areas and towns. Detailed trek notes cover important

routes through the area, giving access details to campsites, scenic spots and places to visit. Separate chapters include physical aspects, flora and

fauna, Aboriginals and their art, European arrival and

exploration, vehicle maintenance and advice on tools to carry. National parks are covered, as are good spots for canoeing, boating, fishing and fossicking. Maps and a list of tour guides make this book worthwhile

for anyone contemplating a visit to the Kimberley. *The Kimberley - An Adventurer's Guide* is available from all good bookshops for \$19.95.



LANDSCOPE

VOLUME 4 NO 4 WINTER EDITION 1989



Effluent disposal ponds from industry disfigure an idyllic strip of coastal land. But restoration work and a new conservation park are planned for the Leschenault Peninsula, near Bunbury. Turn to p.8.



Wood that was once only suitable for firewood can now be used to make high grade furniture. Find out how on p.24.



With spring approaching, the bush beckons...but without proper planning your walk could turn to disaster. See p.40.



A spectacular landscape, with an astounding array of plants and animals lies inland from Jurien Bay. Read about the Mt Lesueur area on p.28.



A population explosion of coral-eating snails threatens the unique reefs of Ningaloo Marine Park. How does CALM plan to counter their attack? See p.14.

COVER



In W.A.'s far north, Aboriginal rangers with ties to land now in national parks draw on the traditional wisdom of their people for use in Park management. Photo-Robert Garvey

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