

# BACK BOX

## Koalas hold on

'There is another animal which the natives call Cullewine, which much resembles the sloths of America.' John Wilson wrote this about the animals we now call koalas in his journal on an exploratory journey to the south-west of Sydney in 1798.

Today, it's safe to say, the koala is alive and well. Nevertheless, we should not become complacent about the future of this symbol of Australia. A symposium on koalas, which was held at Taronga Park Zoo in Sydney in 1976, but whose proceedings came out only a few months ago, revealed just how little we really know about them.

Koala fortunes have by no means followed the downhill slide towards extinction that has been the fate of some other marsupials since European settlers arrived. Indeed, their numbers may well have increased.

Between 1838 and 1840 John Gould assiduously collected specimens in eastern New South Wales and in south-eastern Queensland, yet he could only find koalas in areas with the most suitable habitats, and even then only after carefully searching. Accounts of the exploration and settlement of Victoria during that period also contain few references to koalas compared with other wildlife.

Yet by the 1860s they were abundant in the lower Goulburn district of Victoria, for example, where they didn't exist when the area was settled



Koala in its element.

in 1839. They were described as being present there in 'thousands' during the decades that followed.

Koala numbers everywhere declined drastically during the 1890s and early this century. The animal became extinct in South Australia, and by 1920 the total population in Victoria may have numbered between 500 and 1000. Commercial hunting must have been the major cause, although an eye disease and pneumonia apparently also played their part.

In Queensland also, numbers fell drastically, but not until the late 1920s and early 1930s. This time an epidemic, not commercial hunting, seems to have been the cause.

Today the koala is flourishing in some 100 'secure' areas in New South Wales. It's also thriving in Victoria, particularly in Gippsland and west-central Victoria. Reintroductions carried out since 1923 by the

State Fisheries and Wildlife Division seem to have played no small part in this recovery.

The animals also seem to be breeding in at least eight localities in South Australia. All have descended from two groups brought into Flinders Chase on Kangaroo Island in 1923 and 1925.

In Queensland, koalas seem to be present throughout the south-eastern portion. They also occur in scattered and isolated populations in the regions around Townsville and Emerald in the northern and central parts of the State.

The animal, of course, became extinct in Western Australia some 20 000 years ago. Koalas were successfully reintroduced into the Yanchep National Park in 1947 at the second attempt.

Not all introductions have been successful, and the failures underline the fact that we know so little of the animal's biology.

Even today, it's still not possible to say for certain what

species of gums these animals, which eat only eucalypt leaves, need to thrive. Koalas have been linked with some 60 species. Forest red gum (*Eucalyptus tereticornis*), grey gum (*E. punctata*), and manna gum (*E. viminalis*) seem most favoured.

'Stress' and disease seem to be the two commonest causes of failure. Stress is the result of the adrenal glands failing to produce enough hormones. Injections of adrenal hormones may help. But as experience with reintroduced koalas in Canberra's Tidbinbilla nature reserve has shown, this approach does not always solve the problem.

Dr A. R. B. Jackson of the University of New England, Armidale, has listed nine diseases that afflict koalas, but he admits that his group of veterinarians are merely 'enthusiastic amateurs' when it comes to koala diseases.

And what measures should we be taking to conserve koalas? Two contributors to the symposium made the point that merely providing and protecting pieces of habitat in national parks is not enough. An informed koala conservation program should also include active management of both the species and its habitat.

'The Koala. Proceedings of the Taronga Symposium on Koala Biology, Management and Medicine, 1976.' Ed. T. J. Bergin. (Zoological Parks Board of New South Wales: Sydney 1978.)