

Spotlight on our forests

Australia is losing its native forests at a rate of at least 1500 sq. km a year, according to the Resource Assessment Commission. And in some States, deforestation appears to be occurring at a faster rate today than throughout most of the last 200 years.

In the draft report of its Forest and Timber Inquiry, the Commission warns that clearing, mainly for agriculture and grazing, threatens the survival of some forest types, such as the Queensland brigalow. If clearing continues at current rates, Australia's forests will disappear within about 200 years.

The Commission argues that deforestation on unreserved public and private land is cause for concern. Although national parks and other reserves currently protect about 9 million ha of forest and woodland, particular types — such as south-east dry eucalypt and central coast eucalypt forest — are poorly represented within them.

Even then, human activities have modified much of our forests. The report estimates that more than 40% of those within conservation reserves have been logged.

Mr Justice Donald Stewart chaired the inquiry, assisted by two part-time special commissioners, Dr Graeme Caughley of CSIRO's Division of Wildlife and Ecology and Dr David James, a former associate professor of economics at Macquarie University. The Commission produced its draft report on options for the use of Australia's forest and timber resources after 20 months of research and public hearings in all capital cities and many rural centres. Its final report is due to be released shortly.

Using data derived from historical vegetation maps and satellite imagery, the Commission estimates that about half of Australia's forests have been cleared or severely modified since the beginning of European settlement. Much of the clearing occurred before 1930, when the area under cultivation

quadrupled in a 40-year period, and shortly after World War II, for soldier settlements.

However, except in Victoria, where clearing has declined dramatically in the last 15 years, the rate of deforestation in recent years appears to have remained relatively high. Tasmania, for example, has a long-term average of 11 000 ha a year; yet between 1972 and 1980, 17 000 ha of vegetation, mostly forest, were cleared each year for pasture, pine



plantations and hydro-electricity dams.

In New South Wales, where the long-term average is about 57 000 ha of forest cleared each year, the data collected since 1986 suggest that the deforestation rate has jumped considerably — to 80 000 ha a year in the western region plus 20 000 ha a year in the eastern and central regions.

Timber-getting also has had a big impact on Australia's forests. The Commission says native forests in most States have been overcut for several decades, especially the 1960s and '70s. It estimates that almost all of the 'old-growth' or unlogged forest currently not protected in reserves will be cut out in the next 20 years.

The inquiry found no evidence indicating that any large area of forest in Australia was being logged on a sustainable basis. The forest services in Victoria and New South Wales told the Commission that the two States were moving towards sustained-yield

logging. However, the report warns that 'it is not possible to approach a sustained yield by gradually reducing the cut after a long period of overcutting'.

Deforestation and excessive logging have serious implications for biological diversity. Australia has about 160 rare or threatened species of eucalypts, including about 100 found in regions that are primarily forested. Of these, 30 are not represented in conservation reserves. Forests and woodlands also support 40 threatened species or subspecies of mammals, birds, amphibians and reptiles.

According to the working group on ecologically sustainable forest use, the maintenance of biodiversity depends on having adequate reserves for all major forest ecosystems and the further development of scientific methods for determining population viability. The working group is one of nine set up by the federal government to consider the incorporation of the concept of ecologically sustainable development into economic activities that

have a significant impact on the natural environment.

The draft report of the working group on forest use, chaired by Dr Roy Green, Director of the CSIRO Institute of Natural Resources and Environment, says significant gaps exist in the scientific understanding of forest species and their interrelations. It identifies the need for more research into the use of environmental indicators and the distribution of ecological communities, and for improved forest inventories, as a basis for conservation planning and timber production.

The report recommends that State agencies undertake a comprehensive assessment of the status of unlogged and 'ecologically mature' forests to identify their value for conservation, wood production, wilderness and other values. It also recommends that owners of private land be given technical advice or receive management fees to maintain forests for Nature conservation.