

# INCREASE IN MAMMALS ENCOURAGING

By GRANT WARDELL-JOHNSON

**THE NUMBER of Woylies and some other mammals in the Dryandra and Perup State forests has increased over the past few years.**

This was indicated by a survey completed recently by Manjimup research staff.

In June, 1984, a three-week field survey was carried out to investigate the role of fire in the maintenance of ecological processes in the Dryandra forest.

Because fire is the chief means of environmental manipulation available to the manager of a fire-prone environment, the survey was designed to provide information to managers and enable the production of a detailed management plan.

The survey revealed that fire originating from Dryandra forest has not posed a threat to surrounding farmers in the past.

Low fuel loadings and accumulation rates and the distribution and structure of fuels confirms that fire control criteria are considerably different in Dryandra than in the jarrah and karri forest, but there is still the need to prevent wildfires.

The very slow response of rootstock species, the poor crown recovery of trees, the high proportion of fire sensitive species and the slow rates of ground litter accumulation suggest the relative infrequency of fire in this environment.

Hence, frequent fires have serious implications for some important vegetation associations in Dryandra.

Many rare species of marsupials depend on the variety and pattern in the vegetation of Dryandra forest.

In the survey, trapping was carried out to obtain species lists and relative abundances of some species in different vegetation types.

The Woylie is readily trapped in those areas where it occurs at any time of the year, so the survey team was able to compare trapping success with other years, seasons and areas for this species.

Previous trapping revealed low numbers of Woylies in Dryandra.

Trapping rates of only 2.8 percent were obtained in Dryandra in 1971-72 and no animals were caught

during 158 trap nights in 1975.

The recent survey had relatively high capture rates of 9.7 percent, with a 15.3 percent rate in lateritic upland areas.

Woylies have been trapped regularly since 1972 in the Perup forest, 40km east of Manjimup.

Populations have been increasing since 1977 and are now at a relatively high level.

The periods of low and high numbers in the Perup correspond with previous low and high captures in Dryandra.

Other species in the Perup are currently higher than in previous years and when the population of one species is high, many others may also be high.

During the survey at Dryandra, high capture rates of several species were experienced: 30 Phascogales (Phascogale calura), 25 Mardos (Antechinus flavipes) and 4 Brush-tailed Possums (Trichosurus vulpecula).

The high rates for several species not usually caught in large numbers in Perup should not lead us to complacency.

If populations have been low at one time, they can be low again.

There is much less flexibility in management when animals are at low population densities.

If populations of these species change, it is important to know at what level populations exist when carrying out management operations that are likely to affect them.

Monitoring of populations through trapping will, therefore, become an important responsibility for a manager.

Specialist branches would assist with establishing the operation and

with interpreting the data.

Regular monitoring and a historical perspective will provide a valuable insight into the state of environmental health of the forest.

It also improves the managers' knowledge and understanding of the ecology of their forest.

## CRICKET VICTORY

**ON April 6, CALM Collie was challenged by Greening Australia to a limited overs cricket match.**

CALM won the toss and sent the Greenies into bat and struggled hard to dismiss the opening pair.

Once this was achieved wickets tumbled regularly and the Greenies were all out for 107.

The best contributors for the Greenies was their skipper John Hughes who made 29 and wides 25.

CALM's innings started well with an opening partnership of 21.

From this point on the batsmen took complete control and a top score of 40 by John McKenzie Sr. was followed by Mark Humble on 32, Charlie Chapman on 29, Peter Conlan on 24, with all others getting reasonable scores.

CALM was dismissed for 197.

A great day was had by all and as usual the victory keg followed which was most enjoyable after a long day in the field.

## SWDA tours forest

**THE South West Development Authority advisory committee was taken on a familiarisation tour of the karri forest and an inspection of bush and mill operations by the Forest Products Association this month.**

SWDA advisory committee chairman John Mumme said he was satisfied that all the community's interests were catered for in the forests of the South West.

Mr Mumme said the tour was most worthwhile as it placed the advisory committee members in a better position to give first hand advice on timber industry matters.