## FEEDING OF SHEEP AND KANGAROOS

An informative report on research into the plants eaten by sheep and kangaroos grazing together in a paddock in south western Queensland has recently been published. It summarises work carried out by Mr. M. Griffiths and Mr. A. Barton of the Division of Wildlife Research, C.S.I.R.O., to try to find out the amount and type of plants eaten by kangaroos and sheep under the same conditions. This was the first step to be taken in a proposed assessment of the effect of kangaroos on sheep pastures in Queensland. The report was published in the December, 1966, issue of "C.S.I.R.O. Wildlife Research".

The location for the study was chosen near Cunnamulla in the semi-arid plains country of south-west Queensland. Samples of both kangaroos and sheep were taken through 1963-64 and their stomach contents analysed.

From this analysis it was found that, in good years, sheep and kangaroos form a complementary combination, with the kangaroo eating many plants not handled well by the sheep, thus giving better utilization of pasture and greater conversion of herbage into animal protein than if one species grazed alone.

However, on the debit side it was found that there were two factors counting against the kangaroos being completely accepted. One was that they shared the best food producers (flatleaved herbs rich in nitrogen) with the sheep, but, even here, both reds and greys were apparently content to feed largely on portulaca, which is not favoured by sheep. The other factor was that kangaroos seemed to obtain the best blades of grass even at the height of summer.

Thus it would seem that kangaroos in large numbers do have a detrimental effect on wool production. Nevetheless, since specific food preferences between the animals do exist, and there is no evidence that kangaroos, pound for pound body weight, eat more than sheep, the effect is not as great as some pastoralists have imagined. In fact, in the years of the study, which were good ones for south-west Queensland, largely because of the moderate numbers of kangaroos which were found in the area, it could be possible that the kangaroos were beneficial to wool production by keeping in check grasses of low protein content which could otherwise get out of hand and compete heavily with the nitrogen-rich herbs necessary for an optimum wool production.

It must be emphasized that these were the facts as they were found and reported from a part of Queensland. Only similar research here will prove if those results also apply in Western Australia.

6.