

KANGAROO - THE MANAGEMENT OF A RESOURCE

Mr. R.I.T. Prince, B.Sc. Hons., the Research Officer in charge of marsupial research, gave the following talk on A.B.C. Radio on December 9, 1969:

"The fish, fauna, and many other features of the natural environment of this State are the common property of the people of Western Australia, both present, and in the future, and the Department of Fisheries and Fauna, and the Minister, are the custodians of much of this property. The primary activity of the Department in this respect involves different aspects of the conservation of renewable resources, which may or may not be exploited for direct commercial gain, and includes the preservation of diversity in the environment by way of creation and management of reserve areas, and by protection, and management where necessary, of elements of the fauna at large.

There is little doubt that most people agree with the basic aim of conservation of such renewable resources, especially where these are amenable to direct commercial exploitation, and agree with the principle of preserving diversity in their environment, but there is even less doubt that almost everyone has a different idea of what is necessary to achieve such goals. The over-riding consideration in this regard in any management situation is however, that the procedure adopted must be biologically viable, otherwise the final outcome will be the loss of the particular species involved. Our Department is at present attempting to come to grips with a problem of this nature, that of the conservation and management of kangaroos.

The fact that the kangaroos are worthy of conservation is not seriously disputed. What is at issue is that there is a pressing need to arrive at a biologically sound management programme for these animals. At the same time there is a need to cater for the interests of the different sectors of the community, and to resolve some of the conflicts between the animals and some forms of human activities. We must also recognize the fact that some of the so called solutions advocated will result in completely unacceptable biological situations in practice, while others fail to take account of the legitimate interests of other parties concerned with the welfare of these animals. It must be accepted that the only sure way of avoiding some sorts of objections would be the complete elimination of all the animals. This is generally unacceptable, and would

not be a real solution to the problem at all. This also means that there will have to be acceptance of some situations as they are, even though such situations may not be actually liked by those most closely associated with them.

Three species of kangaroos are primarily involved in this problem, although each species actually poses a separate biological problem. These three species are; the Euro or Biggada, the Red or Plains Kangaroo, and the Grey Kangaroo. Some of the apparent conflicts are common to all these species, but their importance differs.

Local situations also vary markedly with each species. If we disregard the Euros, there are actually two different management situations; firstly, that with respect to the Grey Kangaroos, which are generally found in the areas of close settlement and intensive agriculture, and, secondly, that of the Red Kangaroo. This animal inhabits the more arid parts of the State where human density is low, and the major activity is the extensive grazing of sheep, and, to a lesser extent, cattle, by members of the pastoral industry.

In the former case, the human activities have resulted in the removal of large areas of the native vegetation, and its replacement by crops and pastures. The requirements of intensive agriculture are generally incompatible with the needs of the kangaroos, and these animals are now restricted to a much smaller area than they formerly occupied. This trend of habitat destruction and interference is continuing, and it is the most important factor to be considered with respect to the Grey Kangaroo. In the latter case, the pastoral industry is utilizing the same areas as the kangaroos, and it is necessary to examine the impact of each of these animals on the environment, and to assess their relative values in terms of land usage if the long term return from this land usage is to be optimized. The productivity of this environment is intrinsically low, and highly variable, and it does not lend itself to more intensive forms of production. The problem is thus one of optimizing the value of extensive animal production.

In this respect, the profitability of the established wool industry is low, and it is unlikely that the reduction of the kangaroo populations to insignificant proportions will materially alter this fact. The reason is that this situation is primarily a result of fixed returns from wool, with a continuing increase in the costs of production. In addition to this fact, much of the native vegetation has been adversely affected by the overgrazing of the sheep,

and the value of the pasturage for sheep production has been reduced. The potential for increasing the production of wool in the long run is limited by this reduction in productivity of the range, and it is, in any case, doubtful as to whether any increase in wool production would result in any long term improvement in returns. It could be more reasonable to examine the possibility of diversifying the economic bases of the enterprise.

It is already an established fact that the Red Kangaroo is a valuable animal, and it is practicable for this industry to be managed on a sustained yield basis as part of a conservation programme administered by this Department. Perhaps some thought should be given by the pastoral industry to the possibility of their participation in this enterprise. A change of attitude may be all that is needed to ensure the survival of these animals, while at the same time improving the economics of the grazing industry in these areas."