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Title: Multiple Species Bioeconomic Models: An Empirical Analysis

Abstract

The conversion of wilderness to farmland has led to the decline of many southern African wildlife populations. However, in recent times, the growth of private game ranching has seen a reversal of this process, as landowners re-convert farmland to a 'quasi-wilderness' state.

The extent to which this re-conversion takes place is dependent upon the relative profitability of each activity. Increased returns to game ranching is therefore likely to lead to an increased allocation of land to wildlife. We develop a multiple-species bioeconomic model to identify the conditions under which returns to game ranching are maximised.

Key Words: Bioeconomic modelling, wildlife, game ranching