Decision-Making in Conservation: A Model to Improve the Allocation of Resources amongst National Parks

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Decision-Making in Conservation: A Model to Improve the Allocation of Resources amongst National Parks

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ABSTRACT

Protected areas are of prime importance to conservation efforts worldwide because they provide society with a range of important environmental, economic, and social benefits. The ability of government agencies to manage threats to their national parks is often compromised by limited resources. There is a growing need to improve decisions about how resources are allocated amongst conservation responsibilities. Multiple Criteria Analysis (MCA) techniques are integrated decision systems that have the potential to reduce the complexity normally associated with decisions about public and quasi-public goods. The explicit expression of a decision-maker's preferences for certain decision attributes is a key stage in the MCA process. The ability of MCA to increase the understanding, transparency, and robustness of decisions has been demonstrated in many disciplines.

This research describes the development of a MCA model to assist decision-makers with the allocation of resources amongst national parks. After a thorough review of the conservation and protected area literature, a MCA model is developed to determine the utility of a group of national parks based upon environmental, economic, and social significance. The model is tested and applied to the national parks managed by the Parks and Wildlife Commission of the Northern Territory of Australia and to selected parks managed by the Department of Conservation of New Zealand.

The research highlights the need for protected area management agencies to take lessons from the commercial sector and incorporate elements of business practices, particularly comprehensive inventory and data management, into conservation decision-making. It is shown that the integrated decision-making approach taken in this research aggregates complex data in a way that improves managers' ability to make better informed decisions concerning the allocation and distribution of resources.

STATEMENT OF ORIGINALITY

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I declare that:

- This is an original thesis and is entirely my own work.
- Where I have made use of the ideas of other writers, I have acknowledged the source in every instance.
- Where I have used any diagrams or visuals I have acknowledged the source in every instance.
- This thesis will not be submitted as assessed work in any other academic course.

Student's signature: ……

Date: ……..

For Mum and Dad

"One of the most valuable things that we as conservationists can contribute to effective park management is to set clear goals. However, although this is universally applicable, the fact that it is also universally ignored, confused or contradictory should sound warning bells."

- Brian Child (2004, p. 254)

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