

Biodiversity, ecosystem services and invasive alien plants in the Cape: using data to inform management

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Abstract

This talk addresses the management of the unique and diverse management of the Cape fynbos vegetation. The goals of management include water production, biodiversity protection, tourism and recreation, sustainable use of ecosystem products. The management includes fire management (suppression, containment and prescribed burning), and alien plant control (mechanical clearing, biological control). A range of data sources have been combined and utilised to support management in two broad ways. First, research is needed to demonstrate the benefits of interventions (in order to gain support and secure funding), and to assess and improve the effectiveness of management (so that the right things are done in the right place). Invasion by alien plants has emerged as the single greatest threat to sustainable development in the area, largely through the impacts on water resources. These costs amount to billions of rands each year, and are growing despite significant efforts to clear priority areas and to control spread. These estimates have been made possible by the existence of crude and unsophisticated databases, and they point to the urgent need for more focussed interventions that will include tough trade-offs if the impacts are to be contained.