

## Scientometrics

# A bibliometric analysis to illustrate the role of an embedded research capability in South African National Parks

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### Abstract

We conducted a bibliometric analysis of research in or about South African National Parks, published between 2003 and 2013. Our goal was to identify the major research topics, and to examine the role of in-house (“embedded”) researchers in producing relevant knowledge and in leveraging additional benefits through collaboration with external researchers. The authorship of 1026 papers was highly collaborative, with the majority of papers (70 %) being contributed by external researchers. Research was concentrated in five of the 19 parks, and was biased towards animal and ecological process studies in savanna ecosystems. Researchers have mainly worked in older, larger, and arguably more aesthetically-appealing parks that are either close to hand or that provide subsidized accommodation to researchers, and that have established experimental setups or useful long-term data; smaller and more remote parks have received less research attention. Certain priority topics for management, such as degradation of freshwater ecosystems, global change, marine ecology, and socio-ecological dynamics have not received much attention, and are areas identified for growth. Embedded authors were found to be more highly connected and influential than external researchers, leveraging and connecting many research projects. We conclude that there are significant benefits to be gained for the management of protected areas through the maintenance of an embedded research capability.