# THE DEVELOPMENT OF AN INTENSIVE EDUCATIONAL AREA AT PILANESBERG NATIONAL PARK

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Staff at Pilanesberg National Park are currently developing an Intensive Educational Area (IEA), adjacent to the present Education Centre, for the teaching of basic ecological principles. This article describes the rationale behind this development and the logical sequence of events followed in planning it.

#### INTRODUCTION

One of the objectives of Pilanesberg National Park is to utilize the area and its natural resources in ways that will yield the greatest benefits to Bophuthatswana and its people, both now and in the future. Amongst the envisaged benefits are cultural, recreational and educational experiences. Some activities within these categories are mutually conflicting (particularly when one considers that on average over 10 000 schoolchildren participate in environmental education courses at Pilanesberg annually) and for this reason, park management has adopted a policy of zoning the area for different priority activities. It is in this context that the creation of an 'Intensive Educational Area' (IEA) was conceived. (See Figure 1).

## RAISON D' ETRE

The planned Intensive Educational Area will be a zone of approximately 500 ha. where the basic ecological principles can be taught in the field, and where this activity has priority over all other activities. There are four potential advantages to this approach:

- Appropriate teaching aids can be developed to facilitate the learning process *inter alia* by allowing for a 'hands on' approach. Aids could include static, non-living displays, tame animals, or even complete, fully functional 'ecosystems' such as ponds or decomposing logs. These would be particularly useful for teaching large numbers of small children, and also less mobile groups such as handicapped pupils or elderly teachers/ principals.
- The IEA will help to minimize conflict between educational groups and other visitors to the park since it will obviate the necessity of using some of the prime tourist game-viewing areas for educational fieldwork. It is not however intended that field studies will be confined exclusively to this zone.
- The area could serve general visitors to Pilanesberg during non-peak educational periods, particularly on weekends when formal educational groups are at a minimum. Interpretive displays and activities specifically for this target group could be provided in close proximity to Manyane tourist complex, greatly enhancing the value of a visit to the park.
- Closely linked to the above point, the area could be utilized as a 'visitor management' option, particularly when the park is full or near full.

## CHOOSING THE AREA

When selecting the area one factor was considered to be of overriding importance viz. that it be within easy reach of the already existing Education Centre. For this reason, the area immediately adjacent to the Centre was chosen. It also fulfilled other important criteria e.g. it contains a diversity of habitats and useful features such as a saline spring, erosion dongas and a small dam. A further advantage is that the area abuts onto the park perimeter, thereby allowing for useful comparisons to be made with the adjacent area which is subject to a different form of land-use.

The IEA was first delimited on a 1:10 000 orthophoto which showed the existing infrastructure and main topographic and ecological features, but the final boundaries were only decided upon after a ground inspection had been conducted.

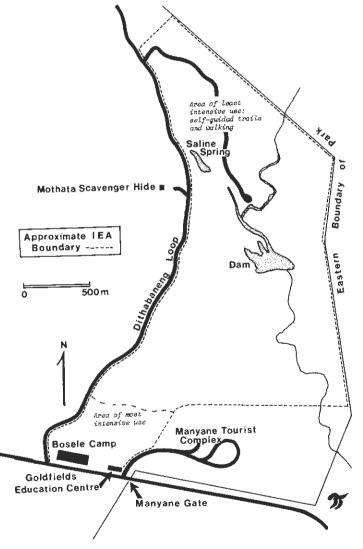


FIGURE 1 The planned Intensive Educational Area.

# PLANNING THE DEVELOPMENT

The plans for developing the area followed three stages:

Firstly, the course curricula for school groups visiting Pilanesberg (subject to some syllabus constraints) were evaluated in terms of the ecological principles which were being taught. This was done in order to identify those aspects of the curriculum which were most suited to teaching in such an area.

- Secondly, an attempt was made to identify all potentially useful features (teaching aids) already present in the area such as erosion dongas, dams and variety of trees.
- The third stage consisted of matching teaching needs with what the area could offer, identifying essential teaching aids which were not already present, and devising a conceptual layout to accommodate all the components. The third stage is essential if the environmental education courses are to be structured and orderly, and if teaching aids are to be optimally utilized.

It is a further intention to develop a matrix lesson plan system with modules for different topics and levels e.g. Std. 3 - water study. Each of these modules will be matched by a field demonstration unit in the IEA.

From the outset it was also decided that the IEA should itself be zoned according to the intensity of development. Rather than have specific and discrete zones, a continuum is envisaged, with the area immediately adjacent to the Education Centre being most highly developed and utilized, while more distant areas would remain relatively undeveloped and would be used for less intensive activities. (See Figure 2).

#### BUDGETING

Internal zoning of the area also proved to be useful from a financial point of view, as the area could then be developed in phases. The area immediately adjacent to the Education Centre for most intensive use would receive priority funding and attention.

The major cost in developing the IEA comes not from the teaching aids themselves, but from fencing to ensure that tame animals do not stray and to prevent dangerous wild animals (particularly black rhino)

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abiotic factors (such as the occurrence of protea species on quartzite ridges), or does it cause some of the abiotic features (as for example in the case of a windbreak)? There is not necessarily an obvious answer and most situations in fact have elements of both. Try it; it's great for learning to look at the whole system.

Take strength from the fact that most geography teachers are facing this situation. Accept the fact that you are not biologists and should not try to teach biology or regurgitate a biology textbook taking all the fun and sparkle out of ecosystem studies as you know them. At the same time don't fall into the trap of just teaching natural regions as you have been doing for years in link of a sound ecosystems approach.

NG AIDS	Increasing distance from	the Education Centre
	Weather station	Self-guided trails to places of interest such
	Snake pit	as erosion dongas, dam, rhino midden, numbered trees, scavenger hide etc. Interpretive displays.
E	Tame animals	
TYPE DF TEACHING	Soil pit/soil types	
	Collection of skulls Pond with aquatic life	
	Tree nursery	

FIGURE 2 Examples of types of activities/teaching aids that could be developed in the Intensive Educational Area.

from entering the area. Some R35 000 would be needed for this purpose, of which R5 000 is essential to enable the area immediately adjacent to the Centre to be fenced off. Once this hurdle has been overcome, expenses would be relatively negligible, and the project could proceed rapidly according to specific priorities.

#### CONCLUSION

The ultimate aim of the IEA is to give more children and teachers an even better quality environmental education experience than it is possible to offer at present. The development is still in the very early stages and work done this far indicates that one of the keys to its successful development lies in how the various 'teaching aids' are positioned relative to one another. Comments from readers on this aspect in particular would be appreciated.

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