

The concept of life: on the social role of conservation areas

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Fourie, J. 1991. The concept of life: on the social role of conservation areas. *Koedoe* 34(2): 157-165. Pretoria. ISSN 0075-6458.

Attention is drawn to the interaction between wildlife areas and surrounding rural Third World communities. The differences between the needs of such communities and those of First World visitors to wildlife areas are outlined. Although incorporating the needs of Third World rural communities is very important, these needs are often neglected. The importance is stressed of wildlife managers becoming involved in the upliftment of their neighbouring communities. The concept of life is used as a holistic approach to develop a set of guidelines by means of which wildlife managers could work out a suitable approach for upliftment programmes. The needs of such communities are investigated with reference to the various levels of life, viz. the biological, the social, the ecosystem and the spiritual levels. Guidelines for addressing these needs are discussed. Finally, the conclusion is made that wildlife managers cannot afford not to get involved in the rural development programmes in their regions.

Key words: development, life, levels of life, holistic approach, needs, social role, rural communities.

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Introduction

It is some time since it has become clear that conservation areas cannot exist in isolation (see *inter alia* Hanks (1984) and Infield (1986)). It has dawned on most wildlife managers that social factors (which include economic and political factors) do influence wildlife areas. The opposite has also been realised, notably that wildlife areas can play a role within their surrounding communities, i.e. influence social processes. What exactly this role is, what it could or should be, is however, not always clear. This could be partly attributed to the fact that every area is unique, and that the unique circumstances will therefore result in unique approaches and measures.

Whilst specific approaches have been formulated in specific areas, a more universal set of guidelines is still lacking. The purpose of this paper is to suggest a universal set of guidelines based on the concept of life, which could facilitate the development of relevant

management strategies in terms of the social role of wildlife areas.

It follows logically that a universal set of guidelines should be developed from a holistic perspective, or the guidelines could fall well short of the ideal. For this reason the concept of life is selected as a point of departure. It forms the central organising principle of the holistic approach developed by Fourie *et al.* (1990). In this approach the concept of life is used to illustrate the unending interrelatedness of the universe. The concept of life functions as a handle to grasp the immensity of creation. It makes sense of the multifaceted nature of life in everyday terms, by indicating that life actually transcends the biological level, and also manifests itself in populations (social life), ecosystems (ecosystem life) and the spiritual processes and products of humankind (spiritual life). Applying the concept of life to conservation management may therefore open innovative ways of striving for a balanced management approach in any particular conservation area.

Overview of literature

According to Odendal (1991) socio-cultural issues cannot be divorced from nature conservation. This view is supported by the holistic approach taken by Fourie *et al.* (1990) in their development of the concept of life. They show that life manifests at various levels and continue to demonstrate the interrelatedness of these levels. This means that biological life, social life, ecosystem life and spiritual life cannot be viewed as separate entities, but should be seen as multi-levelled manifestations of the same phenomenon. The implications of this approach are immense — it practically invalidates any monolithic approach to conservation issues. This interrelatedness is also clearly illustrated by Huntley *et al.* (1989), who argue convincingly that conservation cannot be viewed in isolation of current (and past) economic and political issues. Considering the current situation of a South African society that is ridding itself of the restrictions of a discriminatory political dispensation, it thus becomes imperative to reconsider the role of conservation areas in economic and social issues.

Natural environments assume different values for people with different life experiences (Viljoen *et al.* 1987). Life experiences are relative to the socio-economic position of a particular person or group of persons, which in turn relates strongly to their needs. The typical First World visitor to an area such as the Kruger National Park (KNP) experiences a set of needs that are strongly related to

self-actualization. Several studies have shown that a high percentage of such users are from higher income groups, have professional qualifications and reside in urban areas (Viljoen *et al.* 1987). The needs of this group centre around relaxation, breaking away from the city routine, and fulfilling personally rewarding pastimes such as bird-watching, etc. In direct contrast with this are the needs of the rural communities bordering on conservation areas such as the KNP. Odendal (1991) found the most important needs of similar communities to revolve around the utilization of natural resources essential for day-to-day survival, as well as job opportunities. It is clear that a dichotomy exists between the needs of these two groups. According to Maslow's theory of the hierarchy of needs (Maslow 1987)¹, it would therefore appear that the needs of the first-world visitor lies mainly at the level of self-actualization. In contrast to this, the needs of rural communities surrounding wildlife areas could be seen to centre around deficiency needs, especially physiological and security needs.

The crucial question is whether wildlife managers should incorporate the needs of both groups into their management strategies. One could address this question by investigating the relevance of both groups.

Several authors have indicated in no uncertain terms that the integration of the needs of the local people into the management of wildlife areas in Third World regions is the only long-term option available for the continued

1 Maslow's hierarchy of needs provides an elegant integration of behaviourist, Freudian and humanistic psychology. He argues that all needs can be arranged in a hierarchy — starting with physical needs: food, water and air. This is followed by four levels of psychological needs, viz. the needs for security, love, esteem and self-actualization. Whereas the first four levels of needs derive from deficiencies (i.e. physical, security, love and esteem deficiencies), the last need (self-actualization) is seen as a growth need. Maslow argues that there are differences between the higher and lower needs in the hierarchy — higher needs are evolutionary developments, they are less demanding and could be postponed longer. Satisfaction of these needs produces happiness and leads to individual growth. In contrast, however, the lower a need is situated in the hierarchy, the more demanding it becomes, and gratification becomes increasingly difficult. Maslow argues that culture should therefore be gratifying the needs of people: "it (culture) is created not only for human needs but by them".

survival of such wildlife areas. Hanks (1984) states that sincere attempts must be made to accommodate the felt needs and aspirations of the local people in designing rural conservation and development. If this is not done, wildlife sanctuaries will become increasingly insecure. This is strongly supported by Fuggle (1986) who feels that the threat to the future of conservation lies in the alienation of nature conservation to human needs and aspirations. He cautions that the future of reserves depends as much on political and social factors as on correct biological management. In this regard Fourie (1987a, 1987b) points out that the long-term survival of the KNP is entirely interlinked with the upliftment of local rural communities.

Odendal (1991) argues that "for conservation actions to be successful **in the long term** the philosophy of conservation for the sake of conservation must make place for a more pragmatic philosophy which seeks an integration between the needs of people and the needs of conservation". This seems a highly realistic approach in terms of the International Union for the Conservation of Nature and Natural Resources's definition of conservation, which states that "conservation is the management of human use of the biosphere, so that it may yield maximum sustained benefit to present generations, whilst maintaining its potential to meet the needs and aspirations of future generations". Furthermore the IUCN declaration states that "conservation is a human action, carried out for the benefit of humans" (National Parks Board 1987). Although a strictly anthropocentric view of conservation is not necessarily the most valid approach, it does serve to illustrate that conservation is at least as much about humans as it is about wildlife. The integration of the needs of local people is especially important in Third World areas, where there is a discrepancy between the needs and values of First World wildlife managers and its Third World neighbours, and where the needs of the rural people are strongly related to the resources of the wildlife areas. Numerous wildlife areas in southern Africa conform to this typification (viz. a First World managed wildlife area in a Third World rural region),

e.g. the KNP, Mthethomusha Game Reserve (Kangwane), the central corridor in Natal, the Richtersveld, and many others.

If conservation does not address the needs of people, it becomes irrelevant to them. This view is strongly supported by Infield (1986) in his study of the attitudes of rural people to wildlife areas. He clearly demonstrates how the experience of concrete benefits had a positive influence on the local support for conservation areas. It could be argued that one of the reasons for the success of conservation in Western communities is the fact that it meets the needs of Westerners in terms of recreation and self-actualization (Maslow 1987). It seems that our modern conservation areas excel in meeting the needs of the First World sectors of our population. In contrast one may ask: How do conservation areas meet the needs of people in the Third World areas of southern Africa? How does it meet the needs of local people who live off the land in a sustainable way?

It has been shown that one of the most important aspects in ensuring the acceptance of conservation areas by people (and therefore legitimizing such areas in the eyes of people), is to address the needs of the people in question. Who are these people? Are their needs addressed by wildlife managers? Certainly paying tourists are extremely relevant. Generally the needs of this group are meticulously catered for, because it is they who make budgets balance. Roads are built, rest camps laid out, and large areas are developed within conservation areas in order to meet the needs of this group.

However, when one looks at the situation with the needs of Third World communities in mind, one finds another picture. Their needs are sometimes perceived as irrelevant, often simply because they are different. The fact is that human perception of the relevance of a particular group of people is often clouded through prejudice. Prejudice is described as a negative attitude towards the members of a distinct social group (Baron & Byrne 1987). It often (knowingly and unknowingly) manifests as a negative attitude

towards the needs of others, simply because they belong to a certain group and their needs are therefore different. This specific type of prejudice is not uncommon where First World societies perceive the needs of Third World societies. Perhaps this could explain why the needs of Third World communities have not been considered with the same enthusiasm as those of their First World counterparts.

When one considers the needs of various groups of people, it is important to cover the entire spectrum of needs. The concept of life (Fourie *et al.* 1990) again serves as a reminder that all aspects from biological, through social and ecosystem to spiritual needs should be considered. Therefore even aspects such as environmental education should not be exempted from a critical scrutiny. Are environmental education programs structured to meet the demands of Western value systems and norms? Odendal argues that environmental education should be formulated as an answer to a specific local need (1991). This type of approach can make environmental education extremely relevant in any situation.

It is my opinion that wildlife areas in Southern Africa are largely biased towards the needs of the Western First World communities, and therefore tend to neglect the needs of the rural Third World communities. Since the needs of First World visitors are amply catered for, I intend to show how a balanced approach to the needs of local Third World communities could be developed by making use of the concept of life as an analytical instrument.

Applying the concept of life to the social role of wildlife areas

The holistic nature of the concept of life provides a sound basis for such an analysis. It could enable the wildlife manager to work out an approach which facilitates the acquisition of an embracing strategy, containing sound values that could be applied in practice. This is made possible by the insight that life is a multi-levelled phenomenon, which manifests at various levels, and that the dif-

ferent levels of life are interrelated, interdependent and interactive. The same phenomenon that exists at the level of unicellular organisms also exists at more complex levels - it reaches out beyond the organism into societies and interrelationships and culminates at the level where spirit, thought and feeling operate and where responsibility is called for (Fourie *et al.* 1990; Loader 1991).

As indicated above, the concept of life is demonstrable at four levels, viz. the biological level, social level, ecosystem level and spiritual level. Looking at the management of wildlife areas from this perspective, one may ask: How could these wildlife areas meet the needs of people as demonstrated by the various levels of life?

Life at the biological level

At this level it would be appropriate to investigate the potential contribution of wildlife areas to the fulfilment of basic needs at physiological level. According to Maslow these include food, drink, clean air and protection from the elements (Hjelle & Ziegler 1986). These needs could be translated into items such as protein (food), clean water (drink), thatching-grass and fire-wood (protection against the elements). Another need could be added, namely physiological well-being, which could be translated into muti products.

Infield indicated the existence of a strong need for the utilization of certain products from wildlife areas, e.g. meat, thatching-grass and plant products (Infield 1986). Odendal found support for this view in the needs of rural communities surrounding Mthethomusha Game Reserve (Odendal 1991). Strong needs for venison, wood-fuel, muti and thatching-grass were expressed by these local communities. No explicit need for fish is expressed by these authors, although it is anticipated that a real need for this form of protein will develop.

The fact is that these needs do exist. How to address them is, however, not always a simple matter. Circumstances would differ in different areas in terms of the following as-

pects:

- The needs of local communities. The needs of local people are related to their diet, customs, medicinal practices and cultural aspects such as traditional building styles.
- The available resources of the wildlife area. The particular ecological composition of a wildlife area will determine the availability of resources. It could however, be anticipated that the traditional needs of local communities will be correlated to the available resources of the particular area.
- The accessibility of such resources in terms of the status of a wildlife area. As indicated in the policy statement of the National Parks Board (1987), wildlife managers are faced with selecting a management option on a continuum ranging from multiple utilization to total protection. It is obvious that the management option will have an important effect on the accessibility of resources. However, it is also accepted that a range of management options may be selected for a particular wildlife area, thereby enabling managers to overcome the rigidity of a style of total protection.

The challenge clearly lies in the creation of innovative ways of making resources available on a sustainable basis. Odendal (1991) mentions a number of innovations with regard to Mthethomusha, for instance the establishment of nurseries for the breeding of muti plants, the utilisation of venison and other by-products of a trophy hunting system, and the sustainable utilisation of wood-fuel and thatching-grass. Another approach is suggested by Fourie (1987a), where benefits from an area with a policy of near total protection is considered. A redistribution of a percentage of meat products from culling programmes to local selling points is suggested, while the harvesting of wood debris from road-maintenance and construction programmes for use as wood-fuel and building material is recommended. An innovative

way of making thatching-grass available is to allow cutting of the grass just before controlled veld-burning is to take place.

Innovations are sometimes viewed with suspicion, however care should be exercised to avoid the clouding of judgement by unintended but dormant prejudice. Arguments could for instance be advanced against the idea of harvesting red grass (*Themeda triandra*) on the grounds of ecological impact. However, similar arguments are seldom offered against the cutting of thatching-grass (*Hyperthelia* spp. and *Hyparrhenia* spp.) by management themselves, or against the considerable removal of biomass through culling programmes.

Infield (1986) cautions that products should be made available in such a way that it is experienced as a benefit by the locals themselves - it should not be distributed through a middle man who could absorb all financial benefit in profit-making.

Mention could also be made of the potential of utilising fish resources. I have the impression that very little use is made of this potentially important source of protein, although certain wildlife managers have already started exploiting this. The owners of Londolozi (in the Transvaal Lowveld), for instance, started several years ago with the breeding of barbel (*Clarias gariepinus*) in dams on their property as a protein source for local communities.

Life at the social level

Needs at this level could be equated to Maslow's safety needs, belongingness and love needs and self-esteem needs (Hjelle & Ziegler 1986). All of these are factors that are dependant on a healthy and stable social structure. Safety needs for instance include the availability of employment, employment security, financial security, order and predictability in the community. The needs for belongingness and love refer to the desire to belong to a group, especially an intimate group such as the family, while the maintenance of the family structure is often depen-

dant on a healthy and stable social structure. The needs for self-esteem mainly revolve around the basic desire for self-respect and to be esteemed by others (Hjelle & Ziegler 1986). This type of esteem is dependant on a socio-economic structure in which an individual could master the skills of life, and find stimulating challenges by means of which his/her competence could be developed and enhanced, leading to self-respect and recognition by others.

It is at this level that one finds an enormous challenge for wildlife areas. What contribution do wildlife areas make and what contribution could they make to the establishment of healthy and stable communities on their boundaries - communities that could provide the basis for meeting the social needs of individuals?

- The first and obvious contribution is the *creation of employment opportunities* within the wildlife area. In the KNP alone, for example, more than 3 000 local people are employed. This is no small contribution, but does the potential stop there? What are the possibilities for an area like the KNP to stimulate the creation of employment in surrounding areas?
- Infield (1986) mentions the potential of stimulating the *creation of industry* based on the availability of by-products from game culling operations. Fourie (1987a) also refers to the potential of creating tanning and leathercraft industries, based on the considerable annual production of animal skins in the KNP. Although the annual KNP control quota is variable, based on the ecological monitoring programme, an average annual production in excess of 160 000 kg of animal skin was achieved between the years 1980 to 1985 (National Parks Board of Trustees 1985).
- Odendal (1991) recommends that *venison* be distributed through butcheries, rather than giving carcasses to the tribal authorities. Keeping in mind that prices

at the butcheries should be kept at such a level that it is still perceived as a benefit, the butcheries could also provide additional employment opportunities and could contribute to expanding the infrastructure of the community.

- Another avenue which could be pursued with great success, is the *curio trade*. All too often curios are imported, and the local potential ignored. Fourie (1987a) quotes that the 1985/86 curio sales in the KNP alone were in excess of R3,5 million. The potential for stimulating the development of local industry is immense. Odendal (1991) strongly recommends the expansion of the existing curio trade around Mthethomusha as an integral part of the development of a sustainable tourism infrastructure.
- It is important to note at this stage that Hanks (1984) cautions that *tourism* as a money-earning argument for conservation will become counterproductive if the money derived from tourism is not channelled back into the local communities in such a way that the people will recognise this as a benefit. Too often the hotel agents are the only people outside wildlife areas that benefit from the tourism trade.
- The potential of establishing *indigenous* nurseries should not be neglected. Not only could these create additional employment, but they could serve as a source for the replanting of indigenous trees (in areas where the numbers of such trees have been substantially reduced). They could generate income and establish a link between wildlife managers and the local communities that could offer exciting educational opportunities. Replanting indigenous trees such as the marula (*Sclerocarya birrea*) could re-introduce traditional ways of utilising wild fruits, with all the associated benefits.

According to Streeten (cited in Torado 1981) development "must be redefined as an attack on the chief evils of the world today: malnu-

trition, disease, illiteracy, slums, unemployment and inequality". If the wildlife managers of today see their social responsibility in this light, it opens a challenging new world for them, a world in which they can make a doubly meaningful contribution.

Life at ecosystem level

It is life at this level that sustains biological life, and therefore also communities or social life. It is also life at this level that creates the basis for a community that relatively free of health problems, with a sound social structure, which in turn promotes psychological well-being.

The interrelatedness of the various levels of life becomes immediately apparent when one examines the influence of a healthy ecosystem on biological life — the ability of the environment to produce the necessary food, water and fresh air needed to sustain biological life, not the least of which is the life of humans living alongside wildlife areas.

Dubé (1986) went as far as stating that the right to a healthy environment is as fundamental as the proclamations of the World Charter on Human Rights. However, to expect governments to immediately invest in quality of life to the extent that is actually required in some rural areas, is certainly wishful thinking. It would be more realistic to expect that communities be encouraged to help themselves in order to improve their environmental conditions to a point where it will impact positively on their quality of life.

In this regard wildlife managers can play an important role in promoting sound environmental practices. For instance, environmental days could be held where local people are invited into the wildlife areas, in order to create a forum where environmental problems could be discussed.

Wildlife management has a wealth of relevant knowledge that could be useful to local communities. They have expertise that could be shared with, or offered to the local people. Applying their expertise could only benefit

wildlife areas because this could help reduce the "fence pressure" that is exerted on those wildlife areas. No wildlife area is immune to this fence pressure: poaching, illegal removal of plants, accidental fires, erosion, silting of rivers, encroachment of exotic plants, etc. (Infield 1986). Hanks (1985) cautions that South Africa is suffering staggering losses of topsoil, and points out the enormous cost in terms of energy inputs to offset the deterioration caused by loss of topsoil. The aim of wildlife managers should therefore be to promote sustainable utilisation of the environment, within the context of the traditions and needs of the relevant people.

Life at the spiritual level

Fourie *et al.* (1990) refer to this level as the level at which consciousness and responsibility operates. It is the level of mental processes from which the products of the human mind flow. This is where attitudes are formed, where responsibility is cultivated and decisions are made. Here lies the origin of human action, of the way people live, and eventually of the quality of their environment. This in turn determines their biological well-being and their social well-being. Once again the interrelatedness of life at its various levels is evident.

This is confirmed by Khan (1977), who points out that the satisfaction of material needs is not an end in itself, and thus cannot be separated from the means of satisfying these needs. Various authors have identified the need for education (Coetzee 1988; Infield 1986; Odendal 1991). Coetzee (1988) stresses the importance of the content of education, and identifies the need for education in health, home-economics and social welfare, as well as school education. These needs indicate a desire to develop essential social skills, which in turn, as Khan points out, are the means of satisfying material needs. Environmental education is a unique opportunity for making a meaningful contribution in this regard. The essence of environmental education is outlined in the White Paper on Environmental Education in which it is not seen as a subject, but rather as a

holistic form of teaching (Department of Environmental Affairs 1989). It is therefore perfectly suited to be used as Odendal suggests (1991), namely to be formulated as an answer to specific local needs. Used in this way, environmental education could really become relevant and contribute towards a total upliftment of local communities. Towards this end the cyclic nature of a responsible existence could be realised - through responsible existence biological needs could be addressed by sustainable utilization of a supportive environment, which in turn could contribute to the formation and maintenance of communities with sound social structures.

One cannot ignore the fact that environmental education is a very highly rated need of rural communities. This is amply illustrated by Odendal (1991), and supported by many other authors (e.g. Fourie 1987a; Infield 1986). This is indeed fortunate, for it makes the task of wildlife managers so much easier: they have a very eager and willing audience. What remains is to formulate a relevant message, orientated towards the needs and sensitive to the capabilities and values of the people - W'O Okot-Uma & Wereko-Brobby (1985) describes the priorities of environmental education to be related to the promotion of the sustained improvement of living standards and the attainment of a sound environment.

Lastly it should be stressed that relevant environmental education contributes towards relevant social skills. It therefore contributes towards what is experienced as control over one's own destiny. This reduces stress and encourages people to participate actively in their own well-being. On the contrary, however, a grim picture is painted for situations where people do not experience control over their own life situations. Perceived loss of control over one's own life situation leads to learned helplessness and a fatalistic attitude (Viljoen *et al.* 1987). If this should happen in a community, the consequences for the community and subsequently for the adjacent wildlife area could be disastrous.

Conclusion

Wildlife managers are no longer unaware of the consequences of practising conservation in isolation of the needs of local communities. It is therefore possible for wildlife managers to get actively involved with these communities on a wide front. What is mostly lacking, however, is a well-designed and relevant strategy. Of equal importance is the support of such strategies by official policy and structures, without which such actions could fail (Infield 1986; Fourie 1987a). When the support of official policy and structures is lacking, the isolated efforts of individuals usually become undone, and further efforts are discouraged.

Considering the fact that rural development probably offers one of the greatest challenges by which the future of South Africa can be shaped, and considering the fact that most wildlife areas are located in rural areas, it should be clear that wildlife managers can play a vital role in stimulating rural development. They can make a vital difference to the outcome of such development programmes. In the context of the development of a non-discriminatory political structure in South Africa and the ramifications with regard to the upliftment of rural Third World communities, one may ask: "Can wildlife managers afford **not** to get involved?"

The importance of programmes of sustainable rural development and the creation of employment opportunities is stressed by Hanks (1985). Without this, the poor and rapidly growing populations will deplete their resource base, thereby not only destroying their own life-support systems, but also jeopardising the very existence of wildlife areas.

The conclusion is inevitable: Wildlife managers can no longer afford not to get involved in community development programmes.

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