# Resource Reviews Bronmateriaalbesprekings

ENCOUNTERS WITH WILDLIFE: AN INTRODUCTION TO ANIMAL ECOLOGY by L.B. Hurry. Enviro-Vision Series published by Shuter & Shooter and Aardvark Publications, Pietermaritzburg 1987. 33 pp. R2,99.

An inexpensive magazine-type publication which explains the more involved ecological concepts, such as food chains, ecosystems and habitats, simply. It is a fun book ideally suited to the primary school child, but which many adults would do well to read and understand.

Just enough factual information is given on each topic without making it boring and 'text-bookish'. Certain sections, such as birds' nests, would require some research and observation for the novice. An explanation with regard to sexual differences would have been welcome. It is a pity that the 'tracks' are so small - I know that my children would want actual sizes to compare with in the field. A child with a spelling problem may have trouble with the word puzzles.

Encounters with wildlife: an introduction to animal ecology would make a good, inexpensive, birthday present for any child with an interest in nature.

Monika McDonald

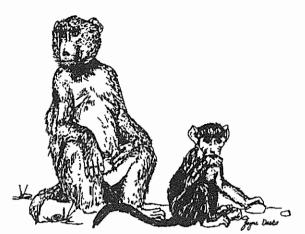
VELD & FLORA - Journal of the Botanical Society of South Africa and the National Botanic Gardens. Published 4 times per year. Individual copies R2,00 each. Free to members of the Society.

The Botanical Society of South Africa and the National Botanical Gardens have recently joined in partnership to produce *Veld & Flora* which, since 1975, has been the quarterly journal of the Botanical Society of South Africa. Vol. 73 No. 1 (April 1987) is the first joint venture of the two organizations and it is thus appropriate that this well established publication be reviewed here.

This high quality journal, written in non-technical language and style, regularly contains a wealth of information of interest and use not only to the amateur botanist but to any educationist concerned with our exceptionally beautiful country, a major dimension of which is its varied flora. Apart from botanical content there are also regular articles of a more general nature such as 'Halley's Comet', 'The Karco' and most recently a sensitive and thoughtful article by Frank Opie reflecting on the dawning and growth of environmental consciousness in young children.

*Vygie*, a supplement to *Veld & Flora*, is directed at the young reader from about age 9 or 10 onwards. The most recent issue (Vol. 6 No. 1) for example contains articles on Natal's Provincial Tree (know it?) and the indigenous flora represented on our coinage.

While it is not suggested that every teacher and environmental educationist should become a member of the Botanical Society, this publication most defintely, like *Archimedes*, *African Wildlife* and several others in the same class, should, ideally, be in *every* school and college library. A year's



subscription is a fraction of the cost of one rugby or cricket ball and is likely to have at least an equal influence in engendering a love of the country. Love of and respect for the environment is in fact to many people the base level of true patriotism.

For further information about *Veld & Flora* and the Botanical Society of South Africa write to:

The Botanical Society of South Africa Kirstenbosch CLAREMONT 7735

Pat Irwin

CRIES OF THE HEART: POEMS OF AFRICA compiled and introduced by Sue Hart. Published by Hodder & Stoughton Educational. Bergvlei 1987. 61 pp. Hard cover R6,95. Soft cover R5,95.

Cries of the Heart: Poems of Africa contains a collection of 46 poems, written in English, by students of the Mgwenya Teachers' Training College in KaNgwane. These expressions of student thought about themselves, their families, their environment and their Creator were recorded during 'solitude' periods of environmental education seminars held at the College. It was found that when students were alone with nature, they were best able to express their deepest feelings on paper.

The poems express a depth of perception, feeling, concern and involvement not only about nature but also about man's place within it. They remind us all to stop and think a while about who we are, where we fit into the scheme of things and where our planet Earth is going. As we are reminded of the beauty and wonder of nature, so too are we reminded of our individual responsibilities towards the earth's continued positive and peaceful existence.

Cries of the Heart: Poems of Africa is a forerunner of the Eco Link project based in White River in the Eastern Transvaal and directed by Sue Hart. It is a most valuable and useful publication for all those involved in environmental and educational work, as well as for the interested layman and the collector of Southern African literature. It provides a truly Southern African perspective of man and nature in a most stimulating form and should be read and re-read, and shared with all those who are interested in, or learning about, our relationship with the environment.

As Sue Hart says in the Introduction: 'Cries of the Heart brings new hope for our troubled world ...'

Frances Gamble

ARENDE & BOERE - EAGLES & FARMERS edited by Duncan Butchart.

Published by the Endangered Wildlife Trust and the Southern African Ornithological Society, Johannesburg 1987. 28 pp. Full colour. Distributed free to farmers. Sold to public for R2,00.

This concise bilingual booklet is aimed primarily at farmers, but, like its predecessor, Vultures & Farmers - Aasvoëls & Boere, it has appeal and value to a much wider audience. The central message is that the issue of raptor conservation is not merely theory but affects us all and is affected by us all. The farmer is singled out only because he is the major controller of the land over which eagles range and depend on for their existence. Perhaps most significant from a communication/education perspective the booklet looks at eagles from the farmer's point of view. It is however of equal value as a handbook for teachers of all levels or as a set of readers for the upper primary school. The language is lucid and free of jargon and most Std. 3 pupils would have little difficulty coping with it. At the low price many schools could afford to purchase a set of ten or more as supplementary readers. It is certainly a product which would justify sponsorship to get it into every rural school library in Southern Africa even, and perhaps most importantly, if that library is only a shelf or cupboard in the principal's office or staffroom. *Arende & Boere - Eagles & Farmers* also deserves to be promoted by the various conservation and wildlife club schemes in Southern Africa. Lengau Conservation Clubs of Bophuthatswana, which have decided upon raptors as their theme/focus for 1988, should find it particularly useful. It is also a useful gift for anyone beginning an interest in birds.

The paper is of good quality and the photographs are sharp and unambiguous, but it is a pity that distribution maps were not also included for the last six species shown as they are an important part of identification. Several marginal species of eagles have not been included, but it is not clear why the Booted Eagle and Ayres Eagle (and for that matter the Secretary Bird) have been left out. 80th of these eagles' distribution range is largely over farmland.

All in all this is an excellent publication and a public service for which the publishers and their sponsor, S.A. Eagle Insurance Co. Ltd., are to be congratulated.

Pat Irwin

## COLOURING BOOKS AND ENVIRONMENTAL EDUCATION --- A REVIEW

The value of colouring books as a dimension of environmental education is discussed. Examples are drawn from recently published environmentally oriented colouring books in Southern Africa.

### **Anne Curror**

#### INTRODUCTION

Colouring books are readily available from bookshops, supermarkets, cafés, museums and many game reserves and are therefore potentially well placed to carry an environmental education message. A cursory glance at the contents of most will however reveal that few cover a particular theme but range in subject matter from an icecream cone to a cactus. Furthermore most contain drawings of varied quality, from artistically crude to accurate, detailed outlines.

Over the past year or two a spate of colouring books with definite themes have appeared on the market as authors and publishers have apparently become aware of the popular attraction of an 'educational' label or have seen the opportunity to develop environmental awareness through this medium. The amount of thought and preparation which has gone into these vary greatly. Two excellent examples are the Enviro-vision series by Lynn Hurry and the series published by the Wildlife Society of Southern Africa this year. Some others, one suspects, merely print 'educational' on the cover, hoping to snare the unsuspecting or undiscerning purchaser.

Because of the widely differing contents, standards and suitability of colouring books available, this review will concentrate on locally produced books concerned with the physical environment, *inter alia* 'wildlife', 'nature' and 'history' and most particularly those which purport to be 'educational'. They will be viewed in terms of both their recreational value and their use in non-formal education. The issue of the use of colouring books in schools is not considered.

#### DD COLOURING BOOKS HAVE ANY EDUCATIONAL VALUE?

It is a widely held view that the use of colouring books, in addition to plain paper and other art materials, can aid the development of skills such as

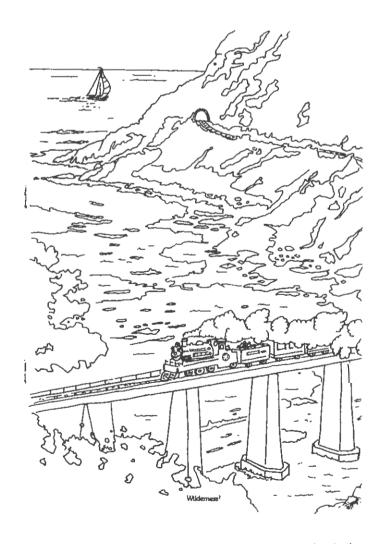


FIGURE 1 From: 'An Educational Colouring Book of the Garden Route'.

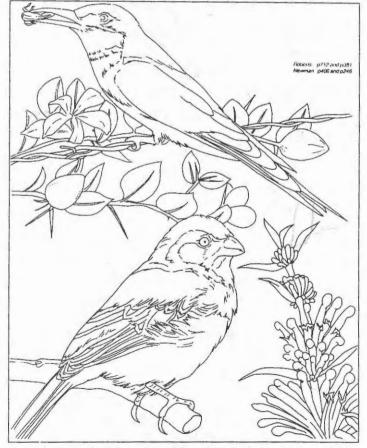
32 Suider Afr. Tydskr. Omgewingsop. Nr 6 (Desember 1987)

fine motor control, eye-hand co-ordination, symbol discrimination and figure-ground perception. They can also introduce concepts, ideas and items of know-ledge to children. It has also been argued in favour of colouring books that children need to develop precise control in the manipulation of crayons, and later pencils, in order to learn to write well. There is little evidence to support the latter view, the most cogent argument against it being that practice with crayons should not be confined to colouring books. Rather children of all ages need ready access to plain paper and a variety of colouring mediums such as paint, wax crayons, felt-tipped pens, pastels, pencil crayons and pencils in order to develop both fine muscle control and their artistic skills.

Karnes (1979, p.1) argues that colouring books are no longer considered adequate as 'art materials' for a school curriculum because an

"activity of this type ignores the normal developmental stages of motor control and visual-motor co-ordination that children experience in reaching higher levels of

artistic behavior and creative expression." Furthermore colouring books are restrictive in the sense that children are often expected to colour 'within the lines' and to accurately fill the prepared designs. They have been justifiably criticized by those who feel that children should be allowed to develop their artistic skills freely. However, according to Einon (1985, p.160) this criticism is not totally fair for while they "are no substitute for artistic endeavours ... They are activities in their own right, which develop entirely separate skills". The value of colouring books lies in more than the development of artistic talent and should be seen as a *complement* to plain paper and as a means of broadening a child's experience.



Better still, why not plant indigenous plants (those that naturally occur in your area) in the garden. The flowers, seeds and fruit will attract many birds, like these **Cape sparrows**. They will also attract insects, and the birds that feed on the insects – maybe a **European** bee-eater!

FIGURE 2 From: 'Gardening for Birds'.

Sparkman & Carmichael agree that colouring books have some merit, but, importantly, they caution parents that

"If your child prefers a colouring book to a blank piece of paper and crayons, it may be because you haven't provided sufficient opportunity for creative work or an environment of acceptance for the finished product. It is encouraging for a child to see his work displayed, and admiring comments from the ones who love him motivate him to continuing efforts."

(Sparkman & Carmichael, 1975, p.85). The message is clear: while colouring books alone are not enough to stimulate artistic endeavours, they can aid the development of other skills. Most importantly however, parents need to be involved and show genuine interest in what their children are doing for healthy development to take place. Above all, assuming children have ready access to plain paper for drawing, colouring books remain popular because children enjoy them! One can take the opportunity to optimise this enjoyment as a springboard for other interests, such as garden birds, wild animals, architecture or a sense of history by being selective when purchasing colouring books.

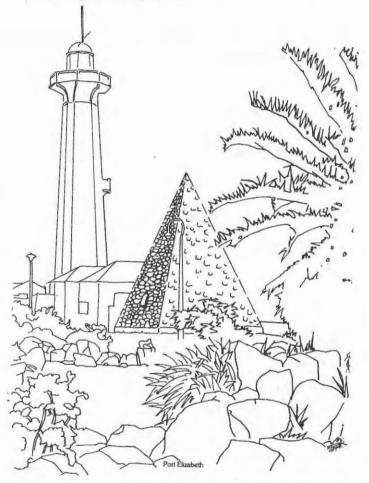
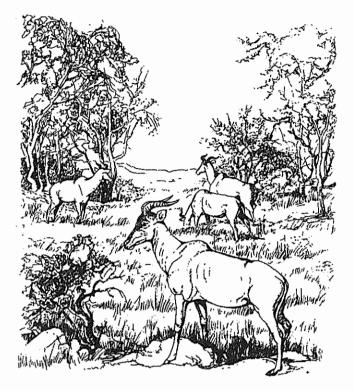


FIGURE 3 From: 'An Educational Colouring Book of the Garden Route'.

#### PURCHASING A COLOURING BOOK

Reasons for purchasing colouring books vary from deliberate choice to last minute gifts and the fact that in the light of increasing book prices they have remained relatively inexpensive. The last reason may account for the rising popularity of colouring books with any pretence to being 'educational': it is possible that many people perceive such books as 'value for money'.

In order to maximize the value of the colouring book



#### Tsessebe

Best habitat: Open glades in lightly wooded country, particularly mapane woodland. Found mainly in the mopane woodlands of the north. Food

- mainly in the mopane woodiands of the form. Food: Mainly grass (a grazing animal). Number of young: One. Enemies: Lion and other large meat-eaters. The tsessebe is one of the fastest antelope in Africa, and its bouncing gallop makes it very difficult to catch. The tsessebe is a rare animal.
- FIGURE 4 From: 'National Parks Wildlife Game and Colouring Book'.

clear as to why one is purchasing it and how the recipient will benefit from it e.g. for amusement only or to learn whilst having fun. The latter reason is possibly the main attraction to potential buyers of the types of books under review and in this light one might bear the following general factors in mind when choosing a suitable book.

The age and ability of the child. Pre-school and lower primary children cannot be expected to colour within the lines or to complete every picture: children often derive pleasure simply from juxta-

posing colours on a background or experimenting with contrasts and combinations. Generally the younger the child the more likely s/he will derive enjoyment from the colouring activity if joined by an adult or older child who will not be too criti-cal of those first efforts. In other words one's expectations of a child's colouring must be in keeping with the developmental stage the child has reached.

- Colouring mediums. Apart from wax crayons one might use pencil crayons, oil pastels, felt-tipped pens or paints to colour the pictures. Thick wax crayons are not suitable for pictures with fine details whereas felt-tipped pens are; paints are unsuited to very absorbent paper and pencil crayons don't show up well on paper which is too shiny. The type of paper is therefore a related factor which might be considered in the light of which colouring medium is most likely to be used.
- Where the book will be used. This factor relates closely to the content of the book. If, for example, an 'educational' book on the Kruger Park is purchased, will it be used in the park where the child can see real examples of some of the pictures in the book, or as a follow-up activity after a visit to a game reserve when the child can recall what was seen and have access to other reference sources? Incidentally both types of activity present wonderful opportunities for parental involvement in the learning process.

More specifically one may look critically at the following aspects:

Quality and style of drawings: These are most attractive to children if they are clear and accurate without fussy details or vague outlines. Figure 1 is an example of the type of drawing which is unattractive to children of all ages. The 'guidelines to shading(?)' serve only to obscure the picture. The drawings in the set of colouring books recently published by the Wildlife Society of Southern Africa are by contrast highly commended for their clarity and accuracy. An example is shown in Figure 2.

Pictures for lower primary children and younger need to be uncluttered, but also without large blank areas which provide an unrewarding exercise for them. Older children on the other hand (upper primary and above) enjoy and are able to cope with much finer detail - especially if they are using felt-tipped pens, pencil crayons or watercolours.

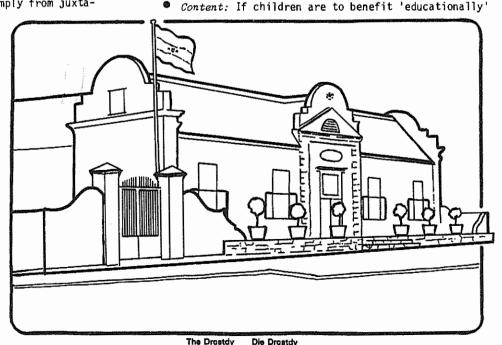
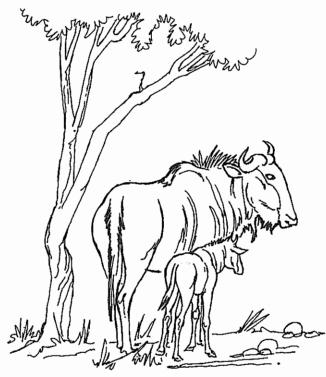


FIGURE 5 From: 'Graaff-Reinet'.

from their colouring experience then the layout of the colouring book needs to be considered i.e. does it cover a particular theme (as do the Wildlife Society books) or carry a meaningful message as in Hurry's books? The contents should be interesting and something the child can relate to. Pictures should be self-explanatory to those too young to read.

Printed information provided for the guidance of those old enough to read should be interesting, relevant and *accurate*. It is unforgivable to provide wrong information for example.about the names of buildings or animals. The provision of sub-titles or printed information sometimes seems to be considered sufficient for a book to be promoted as 'educational'. One needs to be wary of this. What, for example, does Figure 3 show of 'Port Elizabeth'? The same sub-title appears on five pages with no comment given on the *content* of the pictures. Compare this with Figures 2 and 4.



Blouwildebeeste is veral lief vir oop gebiede en kom dus meer voor in die sentrale gebiede van die Krugerwildtuin. Hulle wei graag saam met ander diere en word dikwels saam met bontkwaggas opgemerk. The Blue Wildebeest is especially fond of open areas and is therefore found more in the central parts of the Kruger Park. They like the company of other animals when grazing and are often seen with zebra.

FIGURE 6 From: 'Kruger National Park Colouring Book'.

Many of South Africa's historical or interesting towns now produce colouring books, often through their Publicity Associations. The *Graaff-Reinet* colouring book is a worthwhile example of an informative book which children, after having explored the town and being able to recognize features, would enjoy colouring (see Figure 5). Struik, with their book on the Kruger National Park, have also made an admirable attempt at providing relevant and interesting bilingual information for each picture, an example of which is illustrated in Figure 6.

Paper: The type of paper used will influence not only the clarity of reproduction of the pictures, but the effectiveness of the colouring medium. For example, if the paper is too thin the pictures on the reverse page will 'show through' and make



THE JACKAL

FIGURE 7 From: 'Animals of Southern Africa'.

the book less attractive to users (see Figure 7). Very absorbent ('jotter') type paper is suited mainly to wax crayons, oil pastels and *soft leaded* pencil crayons. Paints and felt-tipped pens are used more successfully on finer grained paper. The Wildlife Society books again are excellent examples of colouring books suited to a variety of colouring mediums because of the quality of paper used.

Activities: Activity books, such as Hurry's, provide much 'learning' enjoyment for middle primary and older children and complement colouring books by providing a balance of activities for a child to participate in rather than merely interesting/ attractive pictures to colour.

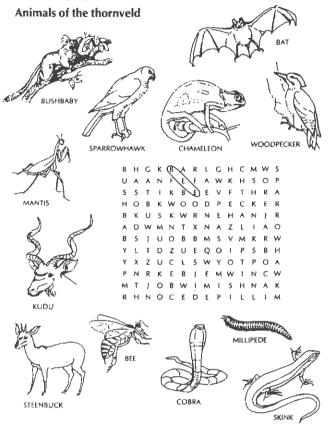
Colouring books which combine pictures to colour with activities such as crosswords, mazes, dotto-dot and scrambled words are ideal for interested children who can read (see Figure 8) but are largely wasted on younger children. For the latter group suitable activities might include *simple* mazes, dot-to-dot diagrams with large numbers (ideally no more than ten) and selfexplanatory matching activities e.g. join an animal to its food/shelter/young.

Not all activities need to be self-contained. Figure 9 shows an example of how the information given can stimulate further self-discovery. Note too (and in Figure 2) the references given for further information on the birds and plants - a simple yet effective stimulus to a child who wants to know more.

#### CONCLUSION

It becomes clear upon examination that it is worthwhile knowing something about the recipient for whom a colouring book is intended. Depending upon one's purpose it may be worth 'shopping around' and being conscious of impressive claims on the covers of colouring books - the product one is buying lies between those covers!

It is plain too that children will benefit more if their parents show an interest and become actively involved in the learning process. Children learn far more if they can relate the contents of their colouring book to reality. Part of this reality lies in parental involvement in such areas as observation and looking for relationships between elements of the environment.



The 12 animals shown on this page all live in the thornveld.

Find their names in the puzzle. (The names run in straight lines but in all directions.)

On the opposite page is a picture of the thoraveld. Find the best habitat for each of the 8 animals whose names you see. Draw the animal in its habitat.

FIGURE & From: 'Encounters with Wildlife: an introduction to animal ecology'.

#### REFERENCES

- EINDN D. 1985: Creative Play: Play with a purpose from birth to ten years. Viking. Penguin Books Ltd. Harmondsworth.
- KARNES M.B. 1979: Creative Art for Learning. The Council for Exceptional Children. Reston, Virginia.
- SPARKMAN B. & CARMICHAEL A. 1975: Blueprint for a Brighter Child. David & Charles. Newton Abbot, Devon.

Colouring books referred to in this review

- DE WET A. & GOTTHARD C. 1981: Animals of Southern Africa: to read, colour and keep. Amanda de Wet & Charles Gotthard, Box 44261, Linden 2104.
- GRAAFF-REINET PUBLICITY ASSOCIATION undated: Graaff-Reinet. Graaff-Reinet Publicity Association, Box 153, Graaff-Reinet 6280.
- HURRY L. 1986: National Parks Wildlife Game and Colouring Book. Shuter & Shooter (Pty) Ltd. Pietermaritzburg in association with Aardvark Publications, Box 6, Nottingham Road 3280.



There is no advantage in the female greater double-collared sunbird being brightly coloured. By being difficult to see, she can rear her young more safely. But why then should the male then advertise himself with his striking colours?

FIGURE 9 From: 'Colour in Birds'.

HURRY L. 1987: Encounters with Wildlife: an introduction to animal ecology. Shuter & Shooter (Pty) Ltd. Pietermaritzburg in association with Aardvark Publications, Box 6, Nottingham Road 3280.

PRESTON G.R. 1987: The Leopard - A Predator Colour in Birds Gardening for Birds. Western Province Branch of the Wildlife Society of Southern Africa, Box 145, Tokai 7966.

- STRUIK undated: Kruger National Park Colouring Book. C. Struik, 56 Wale Street, Cape Town 8001.
- TIPPETT I. undated: An Educational Colouring Book of the Garden Route. Distributed by L. Kirkpatrick & Co., Box 743, Port Elizabeth 6000.

#### Continued from p.14

- IUCN 1980: World Conservation Strategy: Living Resource Conservation for Sustaining Development. IUCN. Gland, Switzerland.
- KEOGH M. 1986: SEP-BEE: An Interim Report. Available from the author.
- MOODIE P. 1987: The Ecology of an Ecology Project and some suggested adaptations for project survival. Southern African Journal of Environmental Education. No. 4 March.