

FLIES ALSO HAVE THEIR USES

In the good old days, the death of a large animal in southern Africa meant good pickings for a wide variety of scavengers. Vultures, jackals and hyaenas would dispose of the flesh, skin and bones in short order. The more lowly scavengers, such as blow-flies, dealt with such fragments of tissue as remained.

The large scavengers have sadly diminished under the onslaught of civilisation. One might assume that their disappearance could now pose something of a problem for nature's cleansing department.

When Fraser Smith came upon a dead white rhinoceros calf in Natal's Umfolozi Game Reserve in 1980 while leading a wilderness trail for the Natal Parks Board, he found that the large scavengers had failed to spot it. Blow-flies, however, had not been slow to take advantage of the situation and the carcass was alive with maggots. Fraser estimated that the calf had been dead for about three days before he took photograph no. 1.

Maggots secrete a copious saliva containing digestive enzymes into dead tissue, liquefying it into a sort of meat broth before sucking it up. Photograph no. 2 was taken 21 hours after no. 1 to show how quickly the maggots were dealing with the rotting tissues.

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Six days later (photograph no. 4), the carcass has been cleaned out and the blow-fly maggots have completed their life-cycle. Only the bones of the calf and the thick, relatively indestructible hide remained.

The species of fly involved here were not recorded, but they are likely to have been bluebottles of the genus *Chrysomya*, perhaps *C. marginalis* and *C. albiceps*.

Different blow-fly species have different feeding preferences and habits. Some, like *Chrysomya marginalis*, can only be found on dead animal tissues. Indeed some species have been credited with cleaning and "disinfecting" wounds on living animals. Other species attack living animals. "Strike" is the name given by farmers to the development of maggot-infested sores in domestic sheep, especially the woolly breeds. The culprit here is usually the greenbottle *Lucilia cuprina*, although *Chrysomya albiceps* will join in once the sore has been opened up by *Lucilia*.

Nature conservationists can argue with some justification that there is an ecological lesson to be learnt here. If we conserve our scavengers (particularly vultures) and thereby maintain a form of ecological balance in the veld, we will have a healthier environment with, hopefully, less "strike" and reduced incidence of fly-borne disease.



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Having said that, we must not fall into the trap of believing flies to be an unmitigated nuisance. Although we may dislike the appearance of blow-fly maggots and their chosen food-source, it is clear from Fraser Smith's photographs that they play an enormously important rôle in the natural breakdown of animal carcasses. We can't do without them.

— EDITOR

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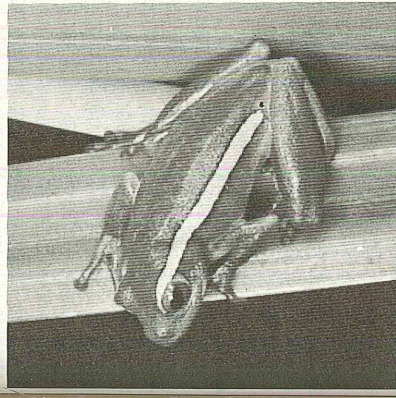
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Cover picture: The yellow-striped reed-frog *Hyperolius semidiscus* is endemic to the eastern districts of southern Africa.

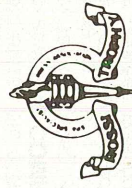
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Head Office: P.O. Box 44189, Linden, 2104, Republic of South Africa.
 Telephone: (011) - 7824723/4
 Transvaal Branch: P.O. Box 44344, Linden, 2104. Telephone: (011) - 7825461
 Natal Branch: P.O. Box 2985, Durban, 4000. Telephone: (031) - 213126
 Western Cape Branch: P.O. Box 1313, Cape Town, 8000. Telephone: (021) - 247421
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 United Kingdom Branch: 12 Cleaver Square, London SE11 4DW

The Wildlife Society of South West Africa: P.O. Box 3508, Windhoek, South West Africa/Namibia. Telephone: (061) - 28784. (Affiliated to The Wildlife Society of Southern Africa.)

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 Editorial correspondence should be addressed to: P.O. Box 58, Cape Town, 8000. Telephone: (021) - 463213. Editorial Office: Room 209, Monpak Centre, 22-24 Sir Lowry Road, Cape Town, 8001. Advertising correspondence should be addressed to P.O. Box 44189, Linden, 2104. Telephone: (011) - 7824723.



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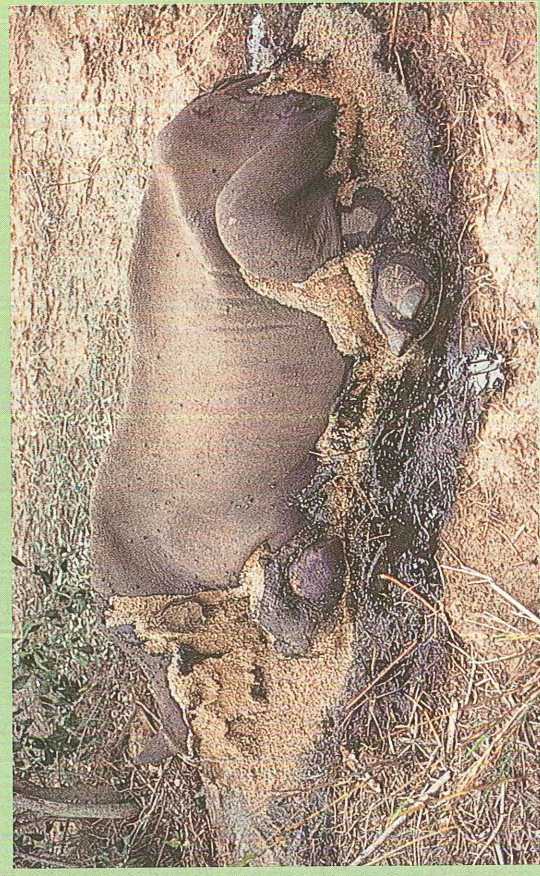


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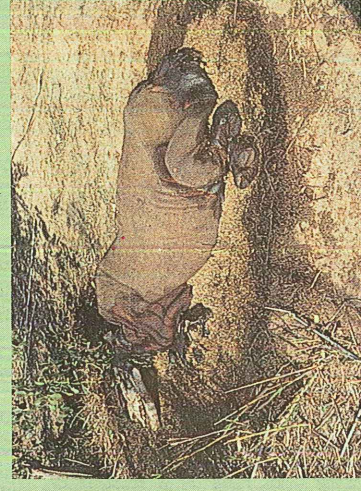
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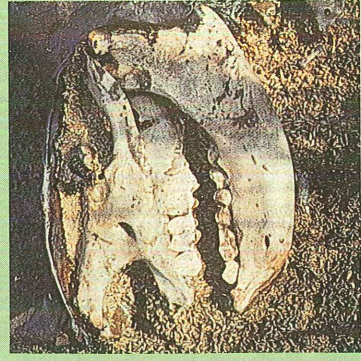
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