FLIES ALSO HAVE THEIR USES

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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.

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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.

The third photograph was taken at the same time, and shows the skull already cleaned up by the maggots.

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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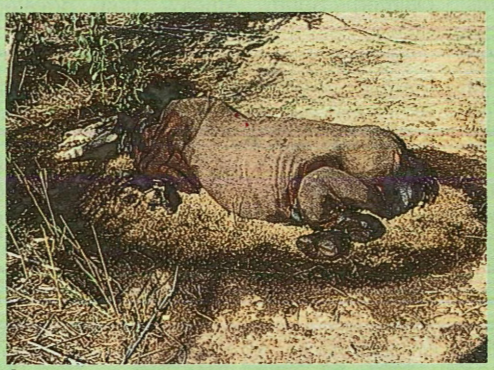

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Having said that, we must not fall into the trap of believing flies to be an unmitigated nuisance. Although we may dislike the appearance of blow-fly maggots and their chosen food-source, it is clear from Fraser Smith's photographs that they play an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

— EDITOR

SUGGESTED FURTHER READING:

COE, M. 1978. The decomposition of elephant carcasses in the Tsavo (East) National Park, Kenya. *J. Arid Environments* 1: 71-86.

RICHARDSON, P. R. K. 1980. The natural decomposition of ungulate carcasses, and the adaptive features of the scavengers involved. Unpublished M.Sc. thesis, University of Pretoria.

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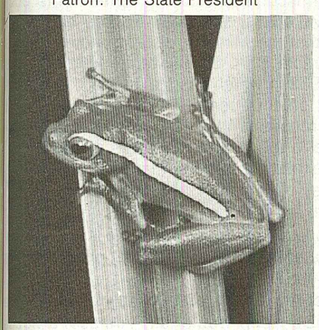

Cover picture: The yellow-striped reed-frog *Hyperolius semidiscus* is endemic to the eastern districts of southern Africa.

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1977/1978/1979/1980

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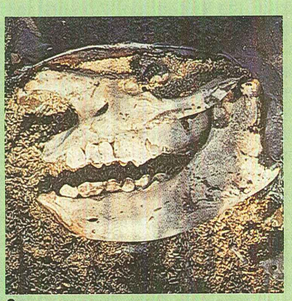

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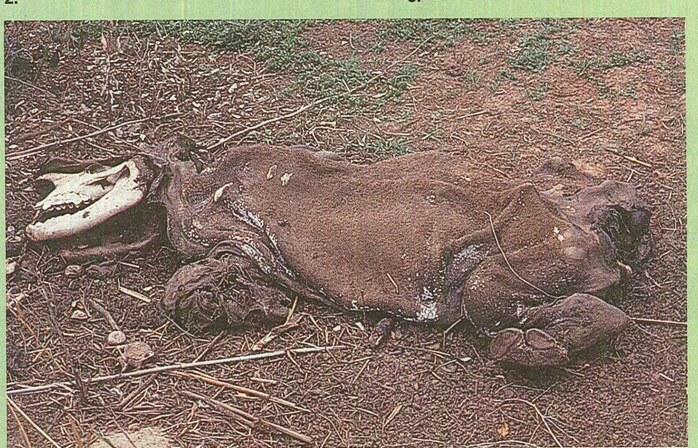

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