

Dehorn or not dehorn?

by David Western

Experts and amateurs alike fall out over the concept of dehorning rhinos — perhaps because we do not know enough about it. Here a well-known scientist expresses his own view that we should try to test dehorning now, to help us make well informed decisions in the future.

Of all the possible ways to conserve rhinos, dehorning has sparked the greatest controversy. Why should a method yet untried generate more concern and discussion than say anti-poaching, captive propagation or efforts to stem the international trade?

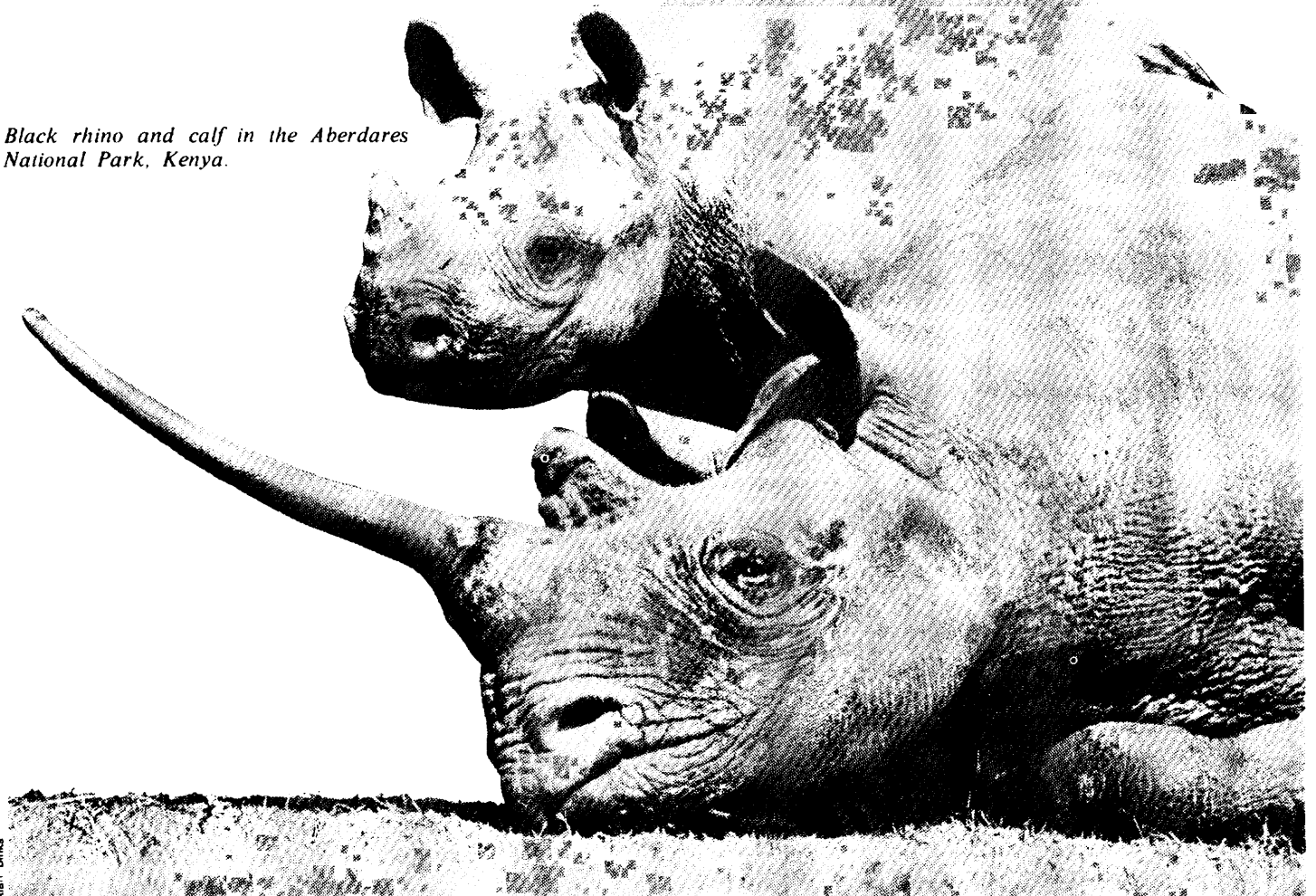
In a sense dehorning admits of failure in all other approaches and argues for a last desperate attempt to conserve rhinos by removing from wild animals the horn that has driven them to the verge of extinction. But are we really at that point, and can we be confident that the gains from dehorning will offset the risks in-

involved? The suggestion has been raised that for such areas as Ngorongoro, Nairobi National Park and Laikipia Ranch, the remaining rhinos should be dehorned to foil poachers.

What is to be gained by dehorning, what is at risk, and what are the best circumstances under which a trial can demonstrate whether the method can contribute to the widespread conservation of rhinos?

I would argue firstly that no effort should be made to dehorn rhinos in localities where the species is holding its own. Why jeopardize more animals when other conservation efforts are working satisfactorily? It would make no

Black rhino and calf in the Aberdares National Park, Kenya.



Alan Binks

sense for example, to dehorn rhinos on Laikipia Ranch where the population is holding up, helped by a combination of antipoaching efforts and natural protection afforded by the dense vegetation cover. When money is so short for conservation, why spend \$100,000 or more to immobilize a few score animals which are surviving well?

More to the point, there are considerable risks and uncertainties about dehorning under the best of circumstances. Even those most experienced in animal capture admit of mortalities during immobilization of rhinos; losses in excess of 10% are not uncommon and some would argue that unless one is prepared to pay exorbitant costs for the most experienced trappers, the losses are likely to run at least twice that level. Then there is the question of horn regrowth. Some doubt exists that cauterizing the horn really works. It seems likely in fact that regrowth would take place at a couple of inches or more a year, in which case it would be necessary to repeat dehorning at least every couple of years. I believe the result would be a race between the poacher and trapper to see who could remove the horn first; the higher the price of horn on the market, the sooner after it has started to re-grow its horn can the poacher profitably kill an animal. Clearly, the costs of repeatedly immobilizing animals would become prohibitive both economically and in terms of mortality. Wounds caused by dehorning also pose a risk of disease, unless of course the horn is cut low down, in which case the question is how small a stump is still profitable to the poacher?

There are yet other problems with dehorning. Will the poacher always be able to distinguish normal and dehorned rhinos, especially in dense cover where they prefer to make their slaughter to avoid detection. I personally doubt whether many poachers would carefully verify the presence of a horn before killing a partly obscured animal. After all, killing rhinos is so simple that little is lost in gambling that at least a partial horn is present.

A more fundamental question in my mind is the risk from predators of a rhino losing its horn. I listen to many pragmatists who vehemently proclaim that worrying about how many dehorned rhinos would be lost to predators is an extravagant question when so many are already being killed by poachers. It is difficult to resist the argument on which this view is based, namely that any action is better than none.

Never-the-less, there is reason enough to concern ourselves with the hazards of dehorning. The horn is not there for decoration. I have seen it used to great effect in deterring lions, and Goddard in Ngorongoro watched a female successfully defend her calf against lionesses, one of which she killed by impaling it. I have only observed two hornless rhinos in Amboseli over the years, but both disappeared shortly after losing them.

Whether they died from predation or poaching is irrelevant; the fact is that they died despite being hornless, or more worrying, perhaps because of it. I think it telling that the rhino has such an extraordinary long dependence on its mother, up to four years in Amboseli and Ngorongoro, even though the calf is capable of feeding independently at half that age. The reason is perhaps, that being solitary animals, the calf has to be defended from predators until it is almost an adult. By contrast the protection of a herd in the case of an elephant permits a female to calve again before the previous one is half grown. Predation may even be a crucial factor in keeping down the growth of Abedares rhinos already, since here ex-warden Phil Snyder attributes the notable lack of immatures to a surfeit of hyenas.

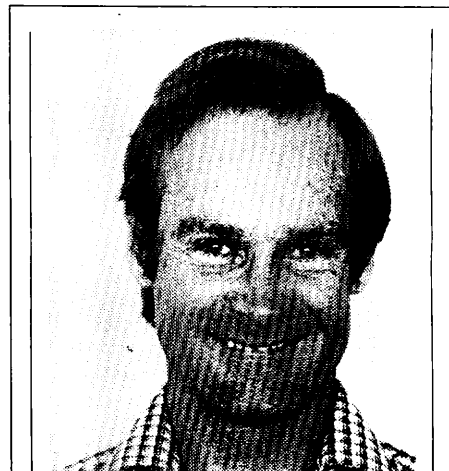
A final risk should be born in mind. Amongst males the horn is used in competition over females and there is the danger that in small populations where one or two animals escape dehorning matings could be monopolised by them. It should be a sobering thought that severely inbred populations generally become extinct without any further help from man or predator.

But despite these reservations, we have to accept that at some point in the future, in desperation, we may be forced to dehorn rhinos as a make or break solution when all else has failed. **Before that point has been reached we should have the foresight to evaluate the case for dehorning as a conservation measure.** To do so we should chose an area where we can test whether the benefits of dehorning really do offset the risks associated with it. Clearly, the ideal location is one where poaching is already driving the population downwards and where rhinos are easily visible. I would then suggest that half the animals in a population of not less than 50 animals be dehorned. Over a period of time the survival of both horned and dehorned rhinos should be monitored, for only in

Black rhino in Amboseli National Park, Kenya.



Frants Heilmann



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this way could we establish whether the gains from lessened poaching do offset the losses from dehorning. Unless a control group of horned rhinos are left, how can we tell whether any change in survival is due to dehorning, or to some other factor, such as a natural fall in the poaching rate, or to an improvement in antipoaching efforts?

The costs of such an operation and of repeated dehorning would have to be evaluated to decide whether future funds would be better spent on alternative conservation techniques. On the basis of such an experiment we could decide whether dehorning has the potential for general application, under what circumstances, and at what cost. It will undoubtedly prove an expensive experiment, for the sale of horns could not defray the expenses, given the illegality of trade in any rhino products.

See also our Editorial on page 7.