

OPERATION BICORNIS

A new initiative to save Damaraland's black rhino

The seemingly insatiable market for rhinoceros horn has brought the black rhino to the brink of extinction.

Conservationists in Damaraland have decided to de-horn their surviving "desert" rhino in a last-ditch attempt to save them from poachers.

*text by Sharon Montgomery
photos by Johan Jooste*

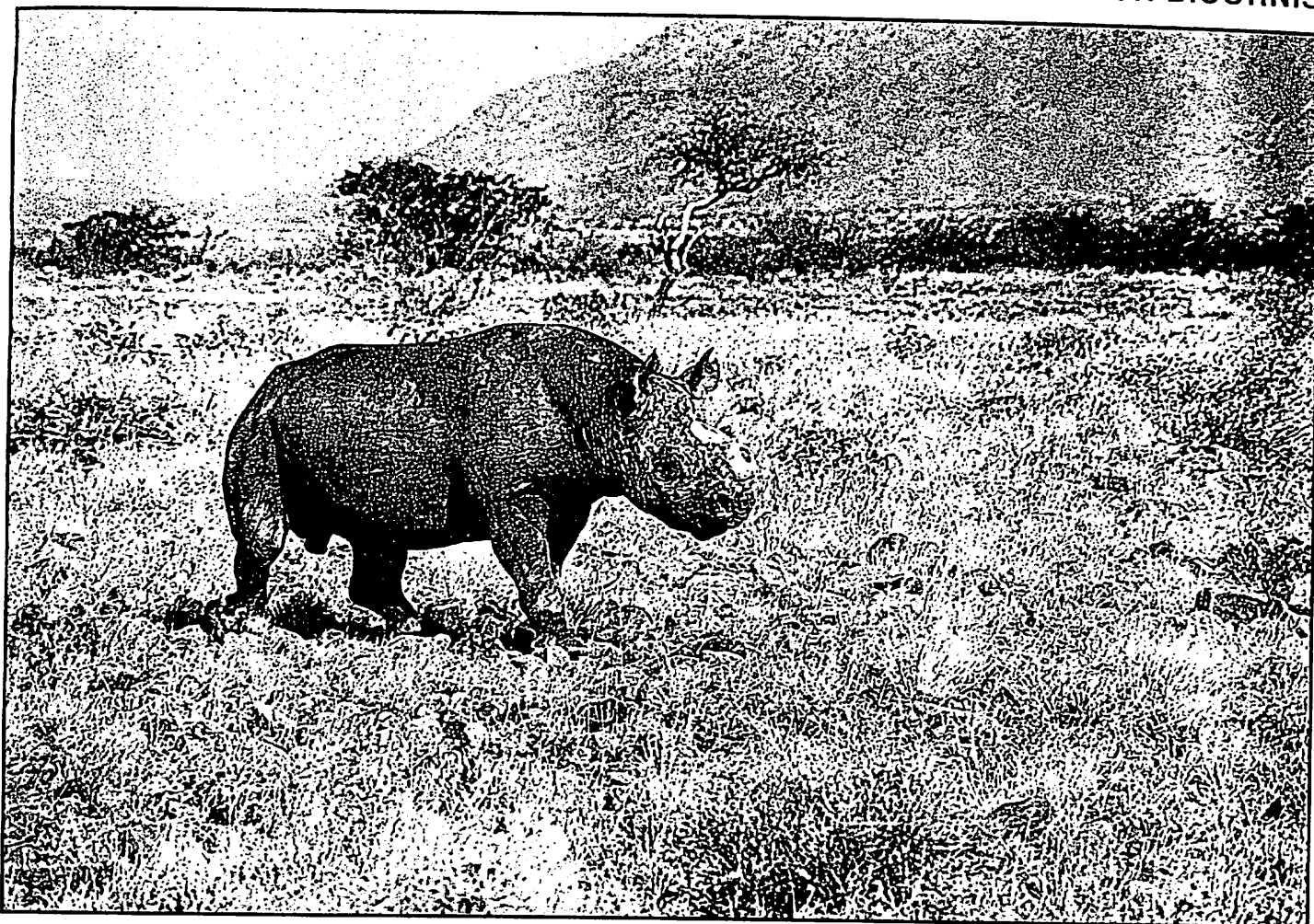
For the past fifteen years we have watched the disastrous decline of the black rhino population in Africa: numbers have dropped by over 60 000 to fewer than 3 500 — poachers have become more organised, the middlemen have become wealthier and conservationists have become desperate. When Namibia lost sixteen black rhino earlier this year, five of them in Damaraland, the prediction that poaching would move

southwards had become reality. There was no time for conferences and discussion: drastic action was called for and Damaraland presented the ideal area in which to put into operation an idea that had been thrown around for a while but had never been put into practice — the de-horning of these magnificent, prehistoric-seeming animals in a last-ditch attempt to thwart the greed of dealers. It was a difficult decision to make. The field-workers in the area have closely studied the Damaraland rhino for nearly a decade and have come to know almost every individual and its history. The de-horning programme, known as 'Operation Bicornis' (named



Hoof-clippers and files are used to remove as much of the remaining horn as possible and to round off the edges to prevent splintering.

Hoefknippers en vyle word gebruik om soveel moontlik van die oorblywende stukkie horing te verwyder en om die rande af te rond om te voorkom dat dit afsplinter.



The dehorned rhino gets shakily to its feet and groggily attempts a charge.

Die onthoringde renoster kom wankelrig orent en probeer storm terwyl hy nog half bedwelmd is.

after the subspecies *Diceros bicornis bicornis* found in this area), is a combined de-horning and translocation operation. It is a joint project of the South West Africa/Namibian Directorate of Nature Conservation and the Save the Rhino Trust Fund (SRTF), supported in part by the Wildlife Society, the Rhino and Elephant Foundation and the Endangered Wildlife Trust.

Operation Bicornis is a laborious exercise. Trackers set out at first light to find a rhino in the mountainous, rocky terrain, a task which might take hours. Once the target animal is spotted, a radio message is sent back to base camp where the game capture unit and helicopter are waiting. Now it is all action. Vehicles race off to the spot and the helicopter with the game capture veterinarian takes off in a flurry of dust. Once the animal is sighted and the capture team in place, the vet estimates the dose of M99 required and the animal is darted in the rump from the helicopter. As soon as it succumbs, the vehicles close in and the rhino is manoeuvred on to its sternum to prevent breathing difficulties. Cloths are placed carefully over its

eyes to protect them from dust, light and flies, water is sluiced over its skin to keep its body temperature down, and injections of antibiotics are carefully measured and administered.

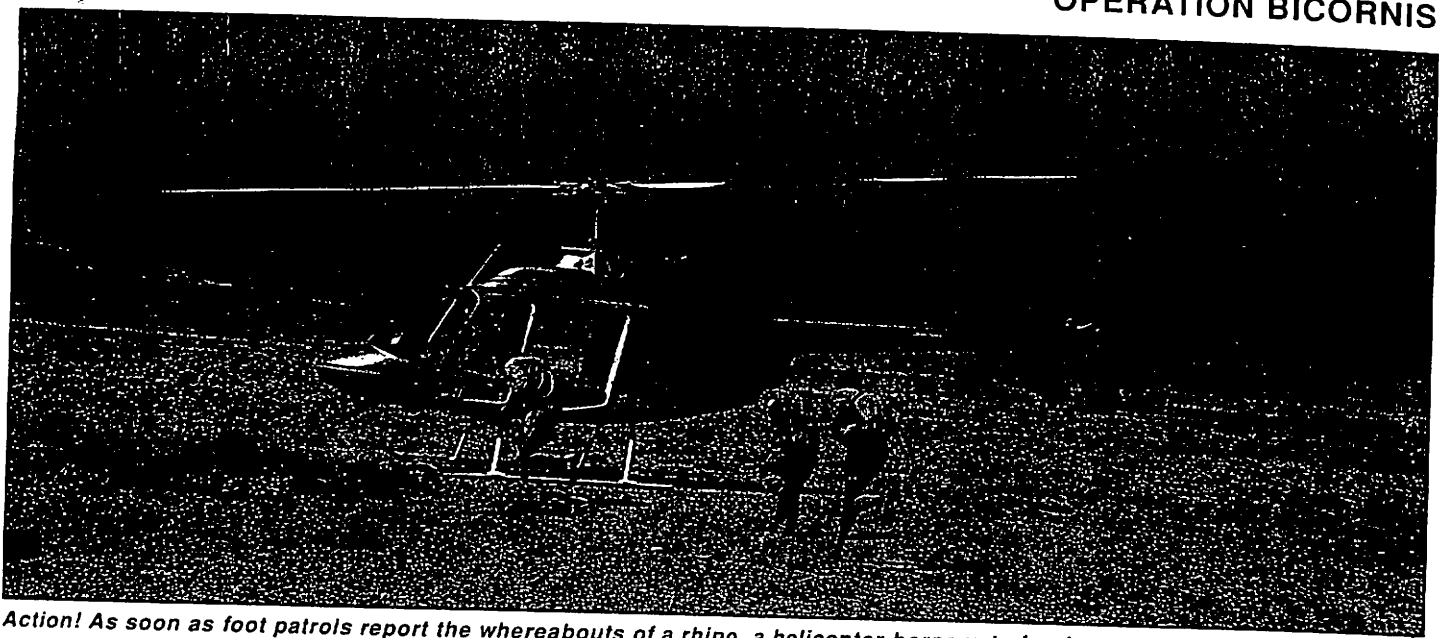
The de-horning is done with a hand-saw and the stump is carefully trimmed with hoof-clippers and files to remove as much of the horn as possible and prevent the small remaining piece from splintering and causing irritation. Rhino horn is simply compacted hair which grows from the skin of the rhino and is not rooted in the skull. Great care is taken not to damage live tissue. As a member of the game capture unit put it, the process can be compared to clipping one's nails and is equally painless. The stump is sealed with Stockholm Tar to prevent infection and the rhino's ears are notched in a distinctive manner to facilitate identification during the essential monitoring which will determine whether de-horning has any detrimental effect on the rhinoceros's behaviour.

The entire operation takes about 20 minutes and within two minutes of the antidote being administered, the rhino

is up and prepared to charge any moving object, albeit rather shakily.

The operation is drastic and the sight of a de-horned rhino can only be described as sad — but sadder still is the sight of a dead rhino which has been de-horned by axe. Negative reactions are natural but there are several aspects of the Damaraland situation that should be taken into consideration.

- The open nature of the terrain in Damaraland — vast plains and bare mountain slopes — makes it unlikely that a poacher will not notice whether a rhino has horns or not. Conservationists here feel that the horn stump which is approximately five centimetres long, which has also been "ruined" by a coating of Stockholm Tar, would not offer the poacher sufficient returns for the risks. All rhinoceros poachers in Damaraland during the past eight years have been caught and brought to trial.
- Past observations in Damaraland have not indicated that rhino in that area use their horns for feeding.
- As there is a low density of large predators in Damaraland it is felt that there is little risk of predation on rhino calves.



Action! As soon as foot patrols report the whereabouts of a rhino, a helicopter-borne veterinarian takes off to dart it.

Aksie! Sodra voetpatrollies die posisie van 'n renoster rapporteer, vertrek 'n veearts per helikopter om die dier met 'n verdowingsmiddel in te spuit.

The removal of her "weapons" will not seriously affect a rhino cow's ability to defend her calf. The possibility of a lion or hyaena which is being charged by an irate rhino cow noticing whether she has horns or not, seems remote.

- Observations of interactions between rhino in the past in this area have not yielded any records of serious injury to either party. Whether this would be the case in a match between a horned and de-horned rhino will have to be determined during follow-up monitoring. The vastness of the area (55 000 km²) and the low numbers of rhino, however, result in few interactions of individuals under normal circumstances. Possible influences of de-horning on mating behaviour would also be observed during long-term monitoring.
- The Damaraland rhino population is considered unique because of the adaptation of its members to the harsh climate and habitat. There is very little water and food, the terrain through which the animals move is mountainous, rocky and in places absolutely desolate, and frequent droughts deplete the already sparse resources even more. Because rhinos need to be naturally adapted to these harsh conditions it would not be feasible to move unadapted or non-acclimatised rhino from other areas into Damaraland. Therefore the only translocations which will be considered by Operation Bicornis will be of those Damaraland rhino in areas particularly vulnerable to poaching; they will be moved to safer situations within the Damaraland ecosystem.
- Damaraland has a poor conservation status as far as formal protection is concerned and as such cannot be con-

trolled in the same way as nature reserves or game parks. De-horning seems to offer the best form of control at this stage.

For all of these reasons Operation Bicornis was considered a practical proposition for Damaraland. It has never been suggested that this type of exercise should be conducted in other regions without very careful investigation. Nor is there any question of relaxing anti-poaching patrols or surveillance. The auxiliary game guard system introduced by Garth Owen-Smith and supported by the Endangered Wildlife Trust has been extended by the SRTF to include several more men to keep an eye on vulnerable areas. The system makes provision for men appointed by the local headmen as guardians of the game in their areas. These men are provided with uniforms, rations and a small salary in return for which they act as the eyes and ears of conservationists, reporting all unusual and suspicious activity in their territories.

Blythe Loutit, field officer of the SRTF, who has spent the past eight years studying the feeding habits and behaviour of the Damaraland rhino and working in conjunction with the Directorate of Nature Conservation to compile an identification dossier of all known rhinoceros individuals, has been requested by the Directorate to lead the essential monitoring programme. So far the de-horned rhino seem to be continuing with their lives in a normal fashion although the apparent increased rubbing of their horn stumps on vegetation has led to the practice of painting the stumps with tar to prevent infection.

For obvious reasons rhino numbers and localities are not being mentioned here. It is perhaps also worth mentioning that it is a pity that there is a continuing trend for the media to quote exorbitant and in many cases unrealistic prices allegedly obtainable for rhino horn. These extravagant prices are normally the final price realised once the horn has been ground down and included in the traditional folk remedies sold in the Far East or after the horn has been converted into elaborately carved dagger handles in North Yemen. Poachers and middlemen cannot hope to obtain these prices but the temptation for the get-rich-quick brigade must be great and should not be encouraged by continued mention being made of the supposed high prices being paid for raw horn in Africa.

Operation Bicornis can be seen as a desperate last-ditch attempt to conserve the unique Damaraland population of the black rhinoceros. It can also be seen as a positive exercise in long-term conservation of a highly endangered species. Many questions need to be answered, but the only way these answers will be reached is by monitoring the effects of de-horning in the field. The fact that there has been close co-operation between government and non-government organisations throughout this exercise shows a positive pooling of resources towards the common goal of protecting these magnificent animals from the greed of the human race. ■

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OPERASIE BICORNIS

'n Nuwe inisiatief om die swartrenoster van Damaraland te red

Die skynbaar onversadigbare mark vir renosterhoring het die swartrenoster op die randjie van uitsterwing gebring.

Bewaringsbewustes in Damaraland het besluit om hul oorlewende "woestyn-renosters" te onthoring in 'n desperate poging om hulle teen wilddiewe te beskerm.

*teks deur Sharon Montgomery
foto's deur Johan Jooste*

Die afgelope vyftien jaar moes ons toesien hoe die swartrenosterbevolking in Afrika rampspoedig afneem: getalle het van meer as 60 000 tot minder as 3 500 gedaal — wilddiewe het meer georganiseerd geraak, die tussenganger ryker en bewaringsbewustes desperaat. Toe Namibië vroeër vanjaar sestien swartrenosters verloor het waarvan vyf in Damaraland was, het die voorspelling dat wilddiefstal suid-

waarts sal versprei, werklikheid geword. Daar was nie tyd vir konferensies en besprekings nie. Drastiese optrede was nodig en Damaraland was 'n ideale area waarin 'n idee in werking gestel kon word waaroor daar toe nog net bespiegel is — die onthoring van hierdie manjifieke, bykans prehistoriese diere in 'n desperate poging om die gierigheid van handelaars in die wiede te ry. Vanselfsprekend is die besluit nie ligtelik geneem nie. Die veldwerkers in die area het die Damaraland-renoster vir bykans 'n dekade bestudeer en het byna elke individu en sy geskiedenis leer ken. Die onthoringsprogram, bekend as Operasie Bicornis en ver-



Lede van die wildvangseenheid van die Direkoraat van Natuurbewaring sny die horing net bo lewendige weefsel met 'n handsaag.

Members of the game-capture unit of the Directorate of Nature Conservation cut the horn just above live tissue with a hand saw.

OPERASIE BICORNIS

noem na die subspesie *Diceros bicornis bicornis* wat in hierdie area voorkom, is 'n gekombineerde onthoring- en verplasingoperasie. Dit is 'n gesamentlike projek deur beamptes van die Direkoraat van Natuurbewaring in Suidwes-Afrika/Namibië en die Red die Renoster-trustfonds (RRTF), en word deels ondersteun deur die Natuurlewevereniging, die Rhino and Elephant Foundation en die Trust vir Bedreigde Natuurlewe.

Operasie Bicornis is baie tydrowend. Spoorsnyers begin daglik spoorsny om 'n renoster in die berg- en rotsagtige terrein te vind en dié taak kan ure in beslag neem. Sodra die teikendier opgemerk word, word 'n boodskap per radio aan die basiskamp gestuur waar die wildvangseenheid en helikopter wag. Daarna spring almal aan die werk. Voertuie jaag na die betrokke plek toe en die helikopter met die wildvangsveearts styg in 'n stofwolk op. Nadat die dier opgemerk is en die vangspan die regte posisies ingeneem het, beraam die veearts die nodige dosis M99 en word die dier vanaf die helikopter in die kruis geskiet. Sodra hy verdoof is, ry die voertuie nader en word die renoster op sy sternum geplaas om asemhalingsprobleme te voorkom. Lappe

word versigtig oor sy oë geplaas om dit teen stof, lig en vlieë te beskerm, water word oor die dier gegooi om sy liggaamstemperatuur laag te hou, en antibiotika-inspuitings word versigtig afgemeet en toegedien.

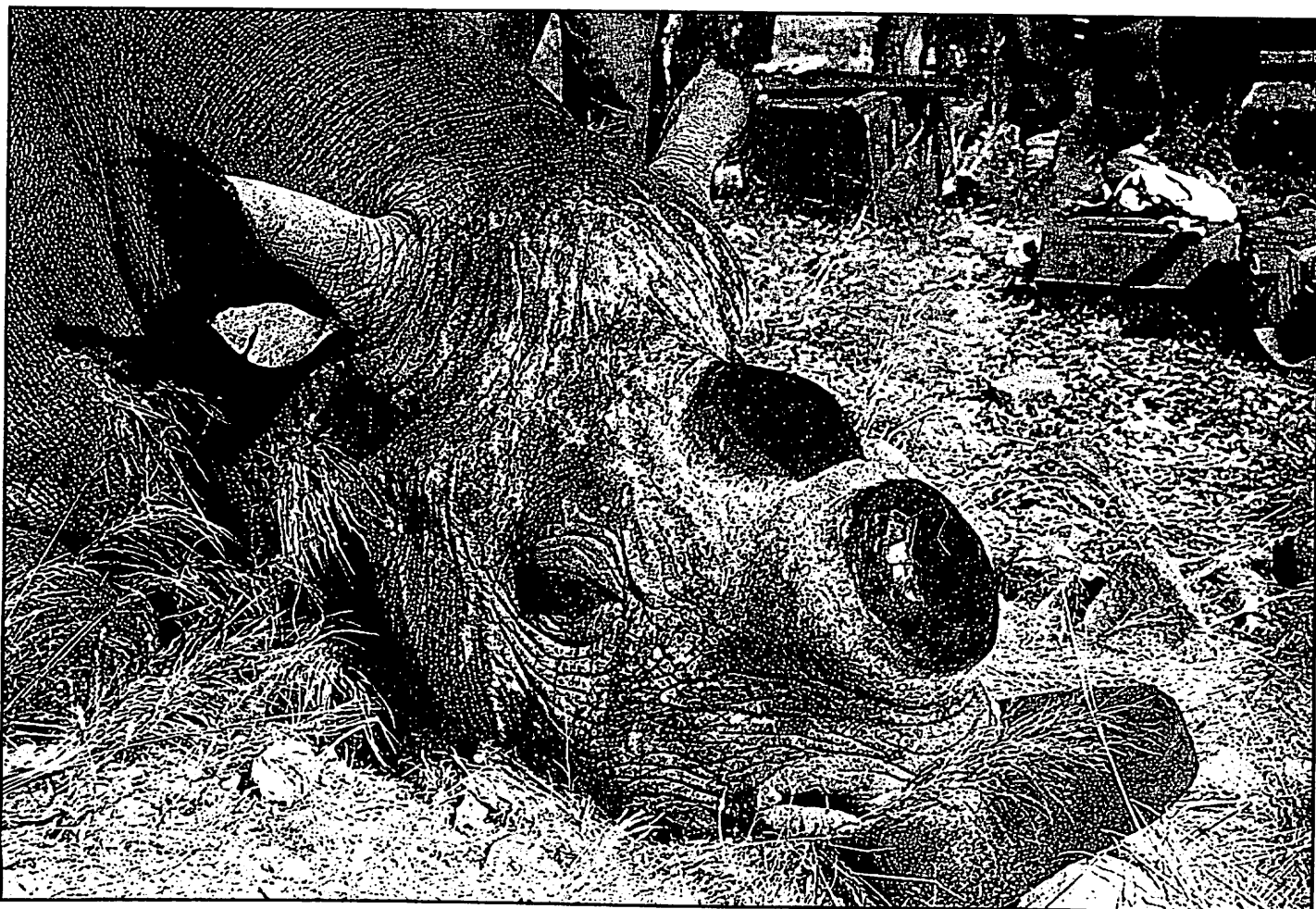
Die onthoring word met 'n handsaag gedoen en die oorblywende stukkie word versigtig met hoeftknippers en vyle afgewerk om soveel moontlik van die horing te verwyder en om te voorkom dat die klein oorblywende gedeelte splinter en irritasie veroorsaak. Renosterhoring is eenvoudig saamgepakte hare wat uit die vel van die renoster groei en die wortels daarvan sit nie in die skedel nie. Groot sorg word aan die dag gelê om nie lewendige weefsel te beskadig nie. Soos 'n lid van die wildvangseenheid dit gestel het, kan die proses vergelyk word met die knip van naels en is dit ewe pynloos. Die oorblywende stukkie word met skoonteer verseël om infeksie te voorkom en die renoster se ore word duidelik ingekeep om identifikasie te vergemaklik tydens die noodsaaklike kontroleringstydperk wat sal bepaal of die onthoring enige nadelige uitwerking op die renoster se gedrag het.

Die hele prosedure duur sowat 20

minute en twee minute nadat die teenmiddel toegedien is, staan die renoster op en is gereed om op enige bewegende voorwerp af te storm, al is dit op wankelende bene.

Die operasie is drasties en 'n onthoringde renoster is 'n droewige gesig, maar 'n dooie renoster wat met 'n byl onthoring is, is egter veel droewiger. Negatiewe reaksies is natuurlik, maar daar is verskeie aspekte van die Damaraland-situasie wat oorweeg moet word.

- Vanweë die oop aard van die terrein in Damaraland, wye vlaktes en kaal berg-hange, is dit onwaarskynlik dat 'n wild-dief nie sal opmerk of 'n renoster 'n horing het of nie. Bewaringsbewustes voel dat die oorblywende stukkie horing wat ongeveer vyf sentimeter lank is en ook deur 'n laag skoonteer "geruineer" is, die wilddief nie genoeg beloning sal bied vir die risiko's wat daarby betrokke is nie. Alle renosterwilddiewe in die afgelope agt jaar in Damaraland is gevang en verhoor.
- Vorige waarnemings in Damaraland het nie daarop gedui dat renosters in daardie area hul horings vir voedingsdoeleindes gebruik nie.
- Aangesien daar 'n lae digtheid van



Die oorblywende stukkie horing word met skoonteer verseël om infeksie te voorkom en om dit te "bederf".

Stockholm tar is used to seal the horn-stump to prevent infection and to "spoil" the remaining horn.



Damaraland se omvangryke dorre vlaktes en berge maak dit uiters moeilik om renosters per voet in dié area op te spoor.

Damaraland's vast arid plains and mountains make it an exceptionally difficult area through which to track rhino on foot.

groot roofdiere in Damaraland is, loop renosterkalfies na mening nie 'n groot risiko om ander diere ten prooi te val nie. Die verwydering van 'n renosterkoei se "wapens" sal haar vermoë om haar kalf te verdedig nie ernstig belemmer nie. Die moontlikheid dat 'n leeu of hiëna wat deur 'n woedende koei bestorm word, sal opmerk of sy 'n horing het of nie, is skraal.

- Vorige waarnemings van interaksies tussen renosters in hierdie area het geen rekords opgelewer dat enige party ernstig beseer is nie. Of dit die geval sal wees in 'n geveg tussen 'n renoster met 'n horing en 'n onthoringde renoster sal gedurende daaropvolgende kontrolering vasgestel moet word. Die omvang van die area (55 000 km²) en die lae renostergetalle lei egter in normale omstandighede tot min interaksies tussen individue. Moontlike invloede van onthoring op paringsgedrag sal ook oor die lang termyn gekontroleer moet word.
- Die renosterbevolking van Damaraland word as uniek beskou vanweë dié renosters se vermoë om by die strawwe klimaat en habitat aan te pas. Daar is baie min water en kos, die terrein waardeer hulle beweeg, is bergagtig, rot-sagtig en op sommige plekke heeltemal verlate, en dikwels droogtes put die bronne wat reeds skaars is selfs verder uit. Omdat renosters natuurlik by hierdie strawwe omstandighede aangepas moet wees, sal dit nie moontlik wees om onaangepaste of niegeakklimatiseerde renosters uit ander areas na Damaraland te bring nie. Daarom is die enigste verplasing wat deur Operasie Bicornis oorweeg sal word, dié van Damaraland-renosters in areas wat veral kwesbaar is vir wild-diefstal; hulle sal na veiliger situasies in die Damaraland-ekosisteem verskuif word.

- Damaraland het 'n swak bewaringstatus wat formele beskerming betref en kan as sodanig nie op dieselfde wyse as natuurreservate of wildtuine beheer word nie. Dit blyk asof onthoring op hierdie stadium die beste vorm van kontrole bied.

Om hierdie rede is Operasie Bicornis as 'n praktiese oorweging in Damaraland beskou. Daar is nooit voorgestel dat hierdie prosedure sonder baie noukeurige ondersoek in ander streke uitgevoer moet word nie. Nog minder bestaan daar enige twyfel daaroor dat anti-wilddiefstalpatrollies of bewaking verslap sal word. Die hulpwildwagterstelsel wat deur Garth Owen-Smith ingestel is en deur die Trust vir Bedreigde Natuurlewe ondersteun word, is deur die RRTF uitgebrei om heelwat meer personeel in te sluit om wag te hou oor kwesbare areas. Die stelsel maak voorsiening vir mans wat deur plaaslike hoofmanne aangestel is as bewakers van die wild in hul areas. Hierdie mans word van uniforms, voorraad en 'n klein salaris voorsien waarvoor hulle in ruil moet optree as die oë en ore van bewaringsgesindes en alle verdagte aktiwiteite in hul gebiede moet rapporteer.

Blythe Loutit, veldbeampte van die RRTF, wat die afgelope agt jaar die voedingsgewoontes en -gedrag van die Damaraland-renoster bestudeer het en saam met die Direkoraat van Natuurbewaring aan die samestelling van 'n identifikasielêer van alle bekende renoster-individue werk, is deur die Direkoraat versoek om die noodsaaklike kontroleringsprogram te lei. Tot dusver blyk dit asof die onthoringde renosters normaalweg met hul lewens voortgaan alhoewel die skynbaar verhoogde skuur van die oorblywende stukkie horing op plantegroei daartoe gelei het dat dit met

teer gevef word om infeksie te voorkom.

Om vanselfsprekende redes word renostergetalle en -liggings nie hier genoem nie. Dit is miskien ook die moeite werd om te noem dat dit jammer is dat daar steeds 'n neiging in die media is om buitensporige en in baie gevalle onrealistiese pryse aan te haal wat na bewering vir renosterhoring behaal kan word. Dié buitensporige pryse is gewoonlik die finale prys wat behaal word nadat die horing fyn-gemaal en in die tradisionele volksmedisyne ingesluit is wat in die Verre Ooste verkoop word of nadat die horing in dolkhandvatsels omskep is. Wilddiewe of tussengangers kan geensins hierdie pryse verkry nie maar dit is nogtans 'n groot versoeking vir diegene wat vinnig ryk wil word en behoort nie aangemoedig te word deur op voortgesette basis in die media melding te maak oor die sogenaamde hoë pryse wat in Afrika vir onverwerkte horing betaal word nie.

Operasie Bicornis kan beskou word as 'n desperate laaste poging om die unieke Damaraland-bevolking van die swartrenoster te red. Dit kan ook beskou word as 'n positiewe oefening in die langtermynbewaring van 'n hoogs bedreigde spesie. Talle vrae moet nog beantwoord word, maar die enigste manier om dit te doen, is om die uitwerking van onthoring in die veld te kontroleer. Die feit dat daar nou samewerking tussen staats- en nie-staatsorganisasies regdeur die proses was, toon 'n positiewe saamsnoer van bronne tot die gesamentlike doelwit om hierdie manjifieke diere teen die mens se gierigheid te beskerm. ■

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