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Roan antelope advisory committee 2013

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10. Jacques Malan - jmalan@malanseuns.co.za/carolien@telkomsa.net
11. Prof Bettine van Vuuren bettinevv@uj.ac.za +27 82 337 4246

History

Meeting of Study Group for Rare Game Species

Date: 15 Jan. 02

Venue: Seminar room Section of Reproduction, Faculty of Veterinary Science, Onderstepoort

Participants:

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Dirk Neethling					
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Johan Kriek is opening the meeting with a short summary of the status quo. Research conducted by Therry Robinson has shown that the Zambezi was never a real barrier and that both southern

groupings are indigenous to South Africa. The Western roan is a different subspecies and should be kept separate.

John Humes is the opinion that the difference between Western roan and others is not big enough to justify a different treatment. And that the boot strap difference is not wide enough to warrant a subspecies; he is working on this statement scientifically.

Industry imported from various countries to the north, legal and illegal....it resulted in genetic risks.... 1st West-Africa animals imported by Ricardo Giatsa to North West for conservation – around 1997. May not move animals. Disease outbreak and had to move. Moved them to John Hume in Mpumalanga. Were not allowed to move. (EJ Nel February 2013)

Rubin is the opinion that owners of Western roan must be allowed to keep Western roan in South Africa with the long-term view to maintain them within South Africa for later relocation to West Africa.

Adrian Engelbrecht mentions that John Hume needs more time to absorb all the facts and then only can make decisions on what he would be prepared to accept as solutions.

Question Johan Kriek to Western Roan owners:

“Would you be prepared to trade Western Roan to indigenous roan”

- Rubin Els: They have Western roan with a conservation aspect and are therefore not interested to trade them against indigenous roan. We need to have them to repopulate Africa with them. In Thaba Tholo the Western roan are by far out-competing the Southern roan in intensive breeding programs. At this stage this not proven in the wild. Have 66 Western roan in Thaba Tholo.
- Hennie Barnard: Has both species. 6 Western roan. Would be welcome an exchange of his Western roan to Southern roan.
- Savva Englezakis: Has 3 animals left. On their farm in intensive systems the Western roan have done worse, are more sensitive to tick borne diseases. Would be prepared to swap.
- Adrian Engelbrecht: Agrees with Rubin sentiments concerning conservation and permission to trade. Are in process to develop vaccine against tick borne disease. Would have no guarantee that other species would survive if they were exchanged.

Western roan owners would like to allow ex-situ conservation programs. New owners should be allowed to register ex-situ conservation programs and then be allowed to acquire Western roan for this program.

Rubin Els: if we carry on to force further research it might be proven at some stage that all roan are infact one subspecies. If we accept the expulsion of the Western roan then it will stand for ever at the status quo.

Jurrie Wessels: Reason for limiting ex-situ conservation programs would be the prevention of contamination of the indigenous sub-species.

Savva Englezakis: Could sell at any time over 100 southern roan, but can not find buyers for the 3 Western roans which are left on the farm. He doubts that there will be a market for the Western roan. Sees no problem if it would be for ex-situ conservation for the future or for possible future markets if new research proves that they are in fact of the same subspecies.

The two major Western roan owners representatives (Rubin Els and Adrian Engelbrecht) should take part in the meeting with nature conservation to express their views and to listen to the official government plans.

Adrian Engelbrecht would like to aim for a free trade of the Western roan. John Humes does not accept or at least question the research which is currently used for the decision making.

Suggestions for the meeting with nature conservation:

Southern roan

- One management unit
- The moratorium is lifted
- Exports allowed if kept pure. Can be kept pure on voluntarily basis.
- Register all roan owners (once off)
- Declare origin and numbers of all the animals on the farm

Western roan

- Ex-situ conservation in approved programs is allowed.
- Movement within registered ex-situ programs is allowed.
- Import for management of gene flow allowed
- Export of Western roan is allowed
- Remove Western roan from farms with small populations where owners are not interested in ex-situ conservation

Landbou weekblad April 2004

'n MORATORIUM op die verskuiwing van bastergemsbokke vanaf 2000 gaan na verwagting binnekort opgehef word. Dit volg nadat in die jongste navorsing bevind is Suider-Afrika se bastergemsbok-bevolking kan nie in subspesies verdeel word nie.

'n HALFEEU gelede het 'n bastergemsbok hom in 'n diep grot in die Waterberge naby Potgietersrus(??) doodgeval.

Merkwaardig genoeg het sy oorblyfsels sowat 45 jaar later gesorg vir die eerste deurbraak in 'n hewige debat oor genetiese verskille tussen Suider-Afrika se bastergemsbokke. Dié beendere het die voorlopige siening weerlê dat die streek se bastergemsbokke uit twee subspesies bestaan. Sodoende het dit tot die "redding" gekom van 'n bedryf wat 'n beraamde R160 miljoen werd is.

Die vroeëre siening dat twee Suider-Afrikaanse subspesies onderskei kan word, het tot 'n moratorium op die verskuiwing van die gesogte boksoort gelei. Telers sê dit is 'n verbod wat hulle die afgelope vyf jaar heelwat aan verlore inkomste gekos het.

Die moratorium is uitsluitlik daarop gemik om moontlike verbastering tussen moontlike subspesies te verhoed. Geen diere mag verskuif word sonder dat hulle geneties getoets is nie. Geen van die sogenaamde suidoostelike tipe mag na die suidwestelike gebied verskuif word nie, en andersom.

Die Minister van Omgewingsake en Toerisme het die moratorium in 2000 op grond van voorlopige navorsing by alle provinsiale owerhede aanbeveel. Dit was nadat prof. Terry Robinson, 'n genetikus van die Universiteit van Stellenbosch, destyds bevind dat daar waarskynlik twee subspesies – suidoostelike en suidwestelike bastergemsbokke – in Suider-Afrika onderskei kan word.

Robinson se jongste bevindings het egter alles verander. Hiervolgens kan Suider-Afrika se bastergemsbokke, hetsy uit die suidoostelike of suidwestelike gebied, nie in verskillende evolusionêr-betekenisvolle eenhede (EBE's) verdeel word nie. Net die enkele bokke ingevoer uit Wes-Afrika-lande soos Benin, Senegal en Ghana is 'n EBE, en behoort dus nie met die Suider-Afrikaanse diere te vermeng nie.

Hiermee is die nodigheid van die moratorium op die verskuiwing en verhandeling van die Suider-Afrikaanse bokke binne Suid-Afrika dus ook daarmee heen.

Een van die telers vir wie dié baie welkome nuus was, is dr. Johan Kriek, 'n veearts en wildboer van Kimberley in Noord-Kaap. Hy was die eerste Suid-Afrikaanse wildboer wat vrylopende bastergemsbokke ingevoer en onder mede-telers versprei het – in 1986 en weer in 1991 uit Malawi. Vandag hou hy sowat 50 bastergemsbokke op sy plaas Mattanu naby Barkly-Wes aan.

(Kriek wys daarop dat die naam bastergemsbok eintlik nie 'n akkurate beskrywing is nie omdat die spesie geensins aan die gemsbok verwant is nie. Die Engelse *roan antelope* is 'n veel beter benaming, sê hy.)

Mnr. Dreyer van Zyl, 'n wildboer van Kimberley, het in 1991 sy eerste bastergemsbok van Kriek gekoop. Toe hy die dier se horings sien, het hy besef dit is soortgelyk aan die bok-skelet wat hy in 1969 in 'n grot op sy vorige veeplaas in die Waterberge ontdek het. Van Zyl het op soek na water in die grot ingeklim toe hy op die oorblyfsels afkom.

Toe die dispuut oor die genetiese integriteit van Suider-Afrika se bastergemsbokke hier teen 2000 losbars, is Van Zyl saam met 'n groep museum-navorsers terug na die grot toe, op soek na wetenskaplike bewyse. Hulle het die vel en beendere op die vloer gevind – steeds in plek soos die dier jare gelede daar ingeval het.

Dit was kort na Robinson se voorlopige bevinding oor die twee suidwestelike en suidoostelike subspesies. Die grot waar die bok gevind is, was in die suidwestelike gebied. "Suidoostelike" bastergemsbok-bevolkings het volgens die voorlopige bevindings in lande soos Malawi, Zambië, Zimbabwe en Tanzanië, asook die Krugerwildtuin voorgekom.

Wetenskaplikes van die Wetenskaplike en Nywerheidsnavorsingsraad (WNNR) het die oorblyfsels van die grotbok gedateer en bevind dat die dier omstreeks 1954 daar moes gevrek het. Genetiese toetse het egter vir die eintlike verrassing gesorg – die dier was van die sogenaamde suidoostelike subspesie, maar moes teen 1954 vrylopend in die suidwestelike gebied gewees het!

Dit het dadelik die teorie bevraagteken dat suidwestelike en suidoostelike "subspesies" vanweë geografiese skeiding uit 'n vroeëre Suider-Afrikaanse tipe ontwikkel het, en dus steeds apart gehou moet word.

Na die grotbok-toets het Robinson verdere navorsing gedoen om vas te stel of suidoostelike en suidwestelike bastergemsbokke histories vermeng het. Hy het onder meer genetiese toetse uitgevoer op 12 van 104 vrylopende bastergemsbokke wat die Nasionale Parkeraad uit Botswana (in die suidwestelike gebied) ingevoer het. Hiervolgens was vier van hulle sogenaamde suidoostelike bokke. Net agt het die genetiese profiel gehad wat aanvanklik aan die suidwestelike "subspesie" toegeken is.

Volgens sy jongste bevindings meen Robinson die verskuiwing van Suider-Afrikaanse bastergemsbokke binne die streek hou nie 'n bedreiging vir die bewaring van genetiese diversiteit in nie.

Dit is veral die geval omdat die diere in dié gebied dikwels nie meer vrylopend is nie, sê hy. "Om steeds 'n puriteinse bewaring-standpunt te handhaaf, is nie meer prakties nie. 'n Pragmatiese, werkbare bestuursplan is eerder nodig wat die wetenskap, die ekonomie van wildboerdery en sosiale geskiedenis in ag neem."

Brief aan natuurbewaring vanaf Dr Kriek (Voorsitter van destyd se Skaarswild komitee) ivm swak permit regulasies en agtergrond op die vorige Roan kwessie - 2004

Hello Danie,

Hiermee ons frustrasies as wildboere met die owerheid van omgewingsake (en veral die paar amptenare van Limpopo Provinsie wat dit, lyk my, doelbewus vir die wildboer moeilik wil maak). Al die frustrasies as gevolg van die moratorium, wat al vir die laaste ongeveer vyf jaar toegepas word, op die beweging van bastergemsbokke.

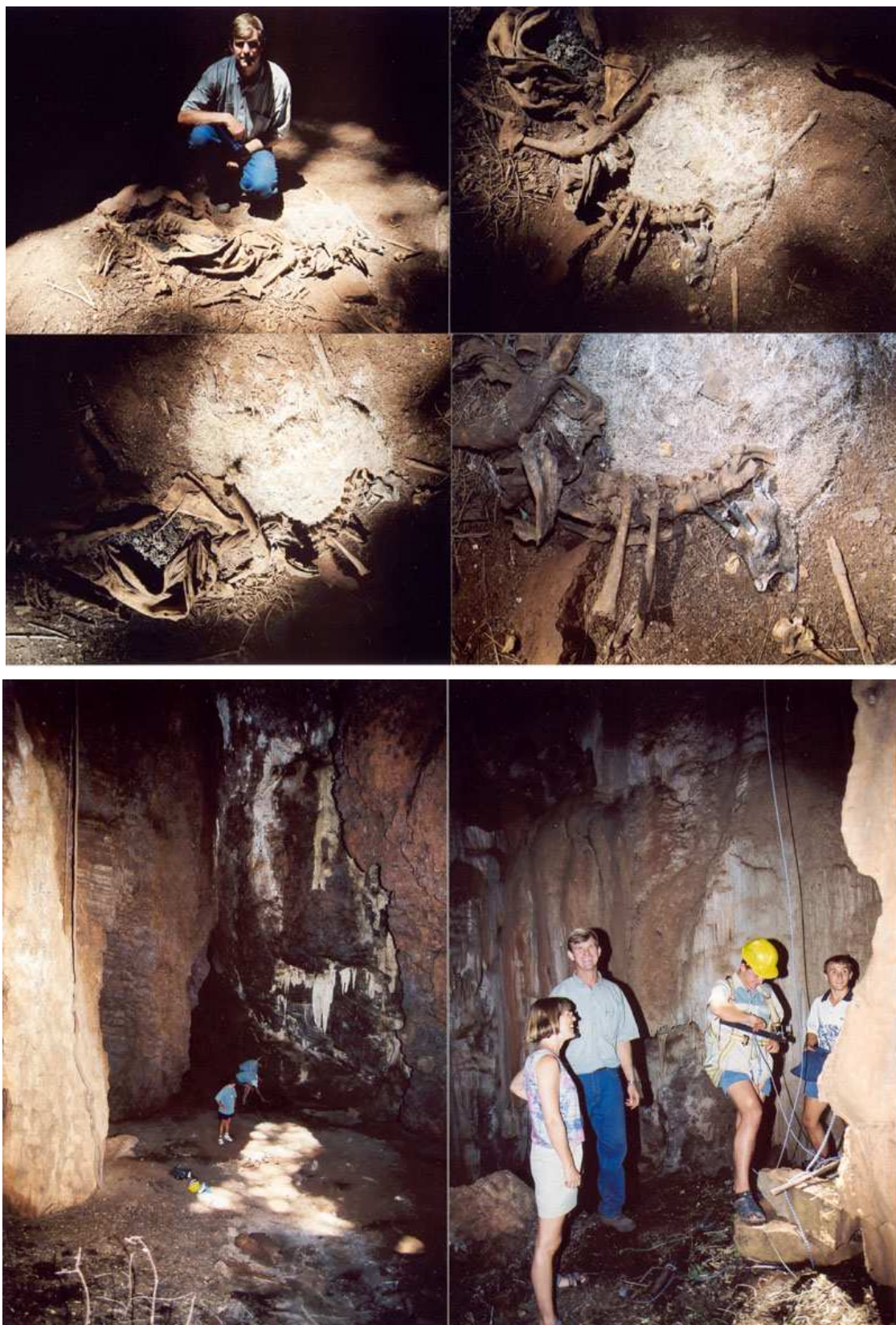
Die doel met die moratorium was om die inheemse bastergemsbok van RSA te beskerm teen die moontlike verbastering met vreemde subspesies, van bastergemsbokke, wat ingevoer was vanaf Malawi, Zimbabwe, Zambia, Namibië en Wes Afrika. Al die partye geraak deur die moratorium het pragtig saamgewerk om die genetikuste kans te gee om hul navorsing te doen. Ons as private wildboere, het selfs so ver gegaan as om monsters op ons eie kostes te versamel en aan te stuur.

Die voorlopige bevindinge het getoon dat die Wes Afrika bastergemsbok uitheems is en duidelik aan 'n aparte subspesie behoort. Die bastergemsbokke afkomstig van Malawi, Zambië, Zimbabwe, het gegroepeer saam met die inheemse bastergemsbok van die Kruger Nasionale Park (RSA).

Aanvanklik het dit gelyk of die inheemse Bastergemsbokke van RSA in twee groepe gegroepeer het met die mitokondriale D.N.A. toetse, naamlik die Suid Wes groep (wat Namibië, Botswana, Percy Fyfe, en Nylsvlei ingesluit het) en die Suid-Oos groep (wat Kruger Nasionale Park, Malawi, Zambia, Zimbabwe ingesluit het).

Ons as wildboere het toe monsters, van 'n bastergemsbok wat hom vrek geval het in 'n grot naby Potgietersrus, laat toets en koolstof datering laat doen deur die W.N.N.R. (die grot fonds is gedoen deur Mnr. Dreyer Van Zyl in 1969). Volgens W.N.N.R. se toetse het die bok hom dood geval in 1954 ($C^{12}+C^{14}$ Datering).

Foto's aangeheg:



DNA - ontledings op die Grot Bok het bewys dat die bok aan die sogenaamde S-Oos groep behoort het, maar die bok was in die area van die S-Wes groeping. Dit het bewys dat daar genevloei was tussen die sogenaamde S-Oos en S-Wes groeperings en dus het ons as wildboere besef dat die S-Oos en die S-Wes groeperings dieselfde bok (subspesie) is en dat hulle nie geskei behoort te word nie.

Ondanks hierdie bevindings het die owerhede die moratorium nie gelig nie.

Die Grot Bok fonds se egtheid was, soos ons gedink het, bevraagteken deur sommige mense en toe is gevra dat nog monsters van “museums” getoets moes word. Ons het met behulp van 'n student dertien museum bastergemsbok monsters gekry en gestuur om te laat ontleed. Groot was ons verbasing toe ons gesê is dat die monsters nie getoets gaan word nie, want die navorsing was glo afgehandel en geen verdere toetse sal verander aan die bevindinge nie.

Intussen het ons gehoor van 104 Bastergemsbokke uit Botswana wat na RSA toe ingevoer word deur Nasionale Parkeraad. (Dit nadat aan ons gesê is dat alle invoere gestop is en dat indien invoere wel oorweeg sou word elke dier DNA toetse sou moes ondergaan. Hierdie 104 bastergemsbokke is ingevoer sonder dat een van die diere getoets is. Monsters is van die diere geneem maar is eers omtrent 'n jaar later getoets. Daar is toe 10 monsters ontleed en groot was die skok toe 3 diere as S-Oos groep, en 7 as S-Wes groep toets). Die toets uitslae was stil gehou en die moratorium was nog steeds nie gelig nie. Weereens was die wildboere nie verkeerd om die S-Wes en S-Oos Groepe Bastergemsbokke as dieselfde bok te beskou nie.

Onlangs is 'n bul (afkomstig van Botswana) deur Nasionale Parke aan 'n wildboer in Limpopo Provinsie verkoop. Die dier se DNA-Toetse het toe as S-Oos groep getoets. Voor die toets uitslae bekend was, was 'n permit alreeds deur Limpopo Provinsie Natuurbewaring uitgereik om toestemming te verleen vir die vervoer van die dier. Op die permit word die dier egter as Hippotragus Equinus Equinus (S. W. Groepering) gesertifiseer. HOE RYM DIT?

Afskrif aangeheg van permit, DNA toets uitslag en faktuur.

Wat dit op neerkom is dat wildboere wat bastergemsbokke verkoop aan iemand in Limpopo Provinsie nie 'n vervoer permit kry nie. Bv. Jan Leon-Cachet word alreeds vir twee jaar lank 'n permit geweier en mag dus nie bastergemsbokke vanaf Kimberley omgewing na Limpopo Provinsie verskuif nie, maar Nasionale Parkeraad mag wel dieselfde sogenaamde subspesie bastergemsbokke verskuif sonder enige probleme. Hoe werk dit asseblief? En hoe lank gaan hierdie bedrogspul en leuens nog voortgaan.

Waarom geld sekere reëls net vir die wildboere en glad nie vir die owerheid self nie.

Wat dit vir ons nog meer frustrerend en onverklaarbaar maak is dat 'n permit glo uitgereik is vir die invoer van 'n verdere ±30 westelike bastergemsbokke vanaf Wes-Afrika (H. Equinus Koba) - Juis die groepering diere wat die aanvanklike rede was vir die instel van die moratorium!

Ons as wildboere eis dat die saak onmiddellik reggestel word asseblief en dat die amptenare wat van hierdie nuutste navorsing van Prof Terry Robinson geweet het maar die moratorium doelbewus laat voortsloer het, van hul poste onthef word, of verplaas word na poste waar hul weinig negatiewe invloede op bewaring kan hê!

Ons vra ook dat die moratorium, op inheemse bastergemsbokke van RSA, dadelik gelig moet word!

Groete

Johan Kriek

Letter by Bettine van Vuuren

From our work, there can be no doubt that the West African group, referred to as the *koba* subspecies, is significantly different to the large East / Central / Southern group. Not only do these two groups (West Africa vs East / Central / Southern Africa) constitute distinct genetic entities, but they most definitely exhibit large differences in adaptive genes. I.e., through thousands of years of evolution, these animals became adapted to their local habitats which then results in West African roan not being adapted to our local conditions, not having resistance to diseases or parasites. In essence, the presence of West African roan in our gene pool (hybridizing with local roan) significantly weakens our roan and renders them susceptible to parasites and disease. It is, of course, also prohibited by the National Environmental Management: Biodiversity Act (#10 of 2004).

The genetic screening that we do at the moment involves only mitochondrial DNA genes. This means that we test whether the maternal line is pure and do not (currently) detect hybrids. If we assume that West African roan is a recent addition to our gene pool (herds), then we will detect all West African animals as not enough time has passed for hybridization to have occurred. However, if West African roan have been moved around for several years, then we must assume that hybridization have taken place in which case we need to test nuclear markers as well (which will detect both maternal and paternal contributions). The former scenario is straight forward in terms of genetic screening; however, if hybridization has occurred and we need to test for this, we would need to re-optimize our nuclear markers in the lab as we deal with a completely different set of markers. Essentially, we would re-screen some pure West African, Eastern as well as Southern African animals before we could accurately and with confidence test for hybridization. This is absolutely essential to ensure an accurate database against which to compare roan antelope.

The most important issue, from a genetic screening perspective, would be to determine whether we need to screen animals using only mitochondrial markers (i.e. test only the maternal lineages), or whether we would need to test for possible hybridization. Each of these routes has implications for roan antelope conservation as well as for the game industry. These implications need to be carefully considered.

Regards
Bettine van Vuuren



DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM

WORKING GROUP I: BIODIVERSITY AND CONSERVATION

ROAN MORATORIUM, RESEARCH RESULTS AND MANAGEMENT OF THE SPECIES

1. PURPOSE

To inform Working Group I (WG I) regarding further discussions on research results and to request WG I to approve the recommendations made regarding the management of the species.

2. SUMMARY

Mr Johan Botha and Mr Johan Kruger from Northern Province presented a document entitled "Genetic variation among populations of Roan antelope in Africa – Summary of research results and options for future management of the species" (Copy attached). Two options for the management of roan antelope were discussed and Working Group members opted for Option 2 as presented in the document.

After the WG I meeting, it became known that Option 2 is contradictory to recommendations accepted at a meeting between Northern Province and the Study Group for Rare Game that took place on Monday 15 October 2001, the day before the WG I meeting.

It is therefore requested that the meeting discuss this issue further and consider adopting the recommendations as presented in this memo.

3. DISCUSSION

Research results indicate that roan antelope in Africa can be grouped into two major Evolutionary Significant Units (ESUs). An ESU can be defined as historically isolated and thus independently evolving sets of populations. The separation between these two groups was strongly supported by both mitochondrial DNA (mtDNA) and microsatellite variation. The one ESU can be described as the West African group, better known as the sub-species *Hippotragus equinus koba*. The other ESU is presently described as the "rest of Africa" group supported by samples from populations in South Africa, Zimbabwe, Botswana, Namibia, Zambia, Tanzania, Kenya, Malawi, Cameroon and Uganda.

Within the "rest of Africa" group there was some indication of substructure or smaller distinct groups or management units, but the results was inconclusive. These smaller groups or management units could have been divided in a south-western group, represented by samples from Botswana, Namibia and South Africa (Nylsvley) and a south-eastern group represented by samples from Zimbabwe, Zambia, Malawi and Kruger National Park.

The research results were not conclusive regarding the division of the "rest of Africa" group and therefore it is recommended that this group be managed as a unit. The West Africa roan,

Hippotragus equinus koba is regarded as a separate sub-species and ought to be managed as such. Furthermore, gene flow between the West African roan and the “rest of Africa” group must not be allowed to take place to prevent contamination of the gene pool of West Africa roan.

4. RECOMMENDATIONS

Based on the information available, the following is recommended:

- 4.1 The moratorium on the import, holding and trade of West Africa roan, *Hippotragus equinus koba* to be maintained until the nature conservation authorities and the roan owners agree on control measures that will be effective and practically implementable to prevent contamination of this pure gene pool.
- 4.2 The south-western and south-eastern groupings to be regarded as one management unit and it should be managed as such. This implies that all roan belonging to this management unit will be regarded as hybrids, unless the origin can be proven.
- 4.3 The moratorium on the import, holding and trade of roan that is part of this management unit to be lifted.
- 4.4 Importation of roan antelope will only be allowed if DNA tests verify that the animals are not the sub-species, *Hippotragus equinus koba*.
- 4.5 No export of roan antelope belonging to the management unit that includes the south-western and south-eastern groupings (hybrids) will be allowed unless the government of the importing country supplies the nature conservation authority with a letter of informed consent.
- 4.6 A register must be developed to reflect the roan populations in South Africa as well as their origin.
- 4.7 Roan owners (including government, private and governmental institutions) may keep roan from a specific geographical region pure. This will facilitate applications to export animals.
- 4.8 A committee will be established between private roan owners and government to facilitate research and disseminate information. This will assist current and prospective roan owners with management options.
- 4.9 The numbers and localities of West Africa roan antelope populations in South Africa must be determined as soon as possible to enable the nature conservation authorities to monitor these populations effectively.

Current situation

Roan Management Workshop Draft Notes

19 February 2013

Management options

Key issues

1. Genetic testing

- The mitochondrial DNA testing must continue. Any applications to translocate roan from roan herds that has been contaminated with western roan (or suspect) should be declined until the nuclear test is finalised
- Nuclear testing will be developed (would take close to 6 month)
- Western roan can be translocated back to the original source (permit should have been issued) (NB: alignment with all legal requirements)
- Landowner must inform the authorities of the test within 24hours and should the official not be able to be present, landowner can make use of a veterinarian in possession of a TOPS permit authorising the activity.
- The purchase to be provided with samples when animals are loaded in absence of an officials
- Protocol: use of specified forensic kit (to be specified by authority); procedure to deliver to testing facilities
- Permit requirements for courier (consider permit requirements for movement of samples)
- Testing facilities: TOPS registered; use correct baseline information. Screen criteria to be provided by DEA
- Facilities to register within 30 days
- Facility currently accepted is University of Johannesburg

2. Management of western roan

- Identification of all existing western roan populations (require risk mitigations measures and exit strategy)
- Export to be considered once nuclear DNA testing is finalised
- Need to confirm if population is managed in terms of permit conditions
- New populations (illegal): enforcement actions
- Amnesty period to be considered for landowners who have western roan
- Possible actions:
 - Translocate back to original source
 - Export under condition that pure Western roan can be proved(back to country of natural distribution)
 - Hunting

- Sterilization
- Ex-situ conservation projects
- National target date for all western roan to be removed

3. National norms and standards for species likely to hybridise
4. To clarify the common name of southern roan
5. Database to be developed (DEA to develop a template and circulate to provinces). To investigate the animal recording device used by DAFF
6. Concern regarding the habitat assessment

Action items

1. Arrange workshop for all roan breeders to participate and to restore/guarantee confidence and convey our proposed solutions and recommendations.
2. Compile database of all Roan breeders (Western, Southern and Hybrids). Make all farmers aware that their hybrids or Kobas will be worthless for trading in SA under the Bio Diversity act 10 (2004), as they are regarded as an Alien Invasive species. Thus it is imperative to communicate those cases to us to resolve this issue.
3. Disclose all Western groups and suspect groups. This information can be accessed via the Promotion of Access to Information Act (Act No. 2 of 2000) (PAIA). Roan owners giving written consent for the declaration of the genetic information can merely be voluntary but should be made compulsory.
4. Get all Roan certified game breeders from nature conservation and TOPS.
5. Discuss DNA test cost and results and negotiate better rates and time frame.
6. Discuss ex-cito permits for pure western groups and keep those groups pure with no translocation from any of those areas.
7. Allow for a grace period for farmers to test and backtrack the Koba purchases.
8. Communicate current state of different provinces and discuss a uniform standard
9. All test results should be made available to the RAC to keep our database accordingly.
10. If Kobas are tested, back track asap and be refunded or animals exchanged with indigenous southern Roan from government (eg: Percy Fyfe).

Vrystaat protocol

In die Vrystaat word Bastergemsbok-aansoeke soos volg behandel : - Hannes Blom

Invoerder/uitvoerder van diere moet aansoek doen vir invoerpermit by Vrystaat. (Faks : (051) 4009523

Sodra aansoek ontvang word, word dit hanteer (aanbeveel/afgekeur/uitgereik) Aan Permit-komitee voorgele.

Sodra permit uitgereik is, sal kontak gemaak word met permitaansoeker. Datum sal gereel word vir vangs van bokke.

In alle gevalle moet 'n geregistreerde Veearts teenwoordig wees.

Beampte van Vrystaat, of in hierdie geval van die Noord-Kaap, moet teenwoordig wees.

Bloedmonster van elke bok moet geneem word. (DNS doeleindes).

Elke bok moet ook van mikroskyfie voorsien word. (uitkenning indien toetse positief is vir "Western Roan")

Bloedmonsters moet verseel word in forensie-sak deur natuurbewaringsbeampte.

Dit is verantwoordelikheid van Veearts of grondeienaar om bloed weg te stuur en te laat toets.

Sodra uitslae ontvang word, moet Natuurbewaring dadelik in kennis gestel word.

Mnr Hennie Butler by Vrystaat Universiteit se kontakno is soos volg : Kantoor (051) 4012489 Sel : 0827718101

Wat die voorkoms van "Western Roan" betref, in die Vrystaat moet die diere van kant gemaak word. Groete.

Hannes Blom
DETEA (Vrystaat Provinsie)

David Paulse amendments to the protocol for the Northern Cape October 2013

Dear Officials / Wildlife Trader and Vets

Due to the enormous problems regarding attending roan sampling the following proposals are made until such time that government can adequately address this issue;

1. Should an official not be able to attend a roan translocation / capture, a Northern Cape registered TOPS veterinarians working with Roan antelope can take the responsibility of tagging, chipping and testing the captured animals. The vet also has to sign an affidavit with every operation. Officials can also follow up with any movement should they wish.
2. The buyer can check the chip and tag number to match the DNA results to ensure the correct animals are loaded. The buyer can double check by taking blood when animals are darted to be loaded, or at any time during the transaction, if he/she suspects anything.
3. If a farmer is known to have Southern Roan and has sold and tested on three or more occasions, with no koba or hybrid results, he/she will be allowed to get a permit to move animals on the first occasion when animals are darted for testing. This will only work if the

buyer does not currently have Roan or if he has a separate area to keep the newly acquired Roan until results are available. By doing it this way roan antelope will only have to be darted once. If any discrepancies arise with the results later on it will be the sellers cost and responsibility to correct the situation.

4. The Department must also receive the results of all Roan tested as this will make the permitting system much easier. The Vet must forward the completed Vet Affidavit (attached) to the Department. This form contains all information needed by the Department and also serves as an affidavit. A suggestion will be made to DEA so that they can have a database or register of all Roan breeders and their herd status.
5. We should follow the Bontebok protocol and accredit all Roan breeders whom have tested all their Roan and continue to test them.
6. Due to the high prices of roan lately, buyers are all now aware of the implications of buying western or hybrid Roan so they will hopefully make sure the correct animals are loaded. The industry has to assist the Department in regulating the roan industry and vets operating illegally must be reported and dealt with appropriately.
7. This is a temporary measure until sufficient resources are in place and /or once all provinces and DEA has been consulted.

Attached is the proposed Vet affidavit which must be completed by all TOPS registered vets with all translocations / captures etc.

I welcome any additional proposals and comments to streamline this process and would like to thank the industry for all comments and suggestions so far.

Warm regards,

David Mark Paulse
Deputy Director
Biodiversity Management
Department of Environment and Nature Conservation

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Fax: 086 5151 741
Mobile: 082 335 7713
Email address: permits@vodamail.co.za

From: David Mark Paulse [<mailto:permits@vodamail.co.za>]
Sent: Wednesday, October 2, 2013 4:06 PM
To: Leon Muller (leon.muller@hotmail.com)
Cc: LHanser (Lhanser@ncpg.gov.za); MDSmit (nkaappermitte@hotmail.com); 'nkota@ncpg.gov.za'; PieterVN (PieterVN@ncpg.gov.za); msmit@ncpg.gov.za; AMabunda (AMabunda@ncpg.gov.za)
Subject: Roan DNA sampling

Dear Leon

Re: Roan DNA sampling

Numerous complaints have been received regarding the availability of officials for the taking of DNA samples for roan antelope. We are well aware of the current situation in terms of personnel and therefore I make the following compromise until sufficient posts are filled;

- ✓ The initial DNA collection must be attended by a Departmental official.
- ✓ Once these tested animals have been cleared as pure southern roan (*Hippotragus equinus equinus*) then an official does not have to attend its recapture for translocation. Should a problem surface we can always check the microchip number / ear tag with the blood sample taken. The DNA test results must be appended to the transport register or permit when these animals are translocated and supplied to our Department. Full responsibility will rest with the capturer to make sure that only roan which have previously been tested as pure southern roan are loaded and translocated.
- ✓ All roan being imported into the province has to be attended by an official to verify the microchip number / ear tag, or if need be, to take additional blood samples.

I trust that these conditions can aid in the problem we currently facing with regards to the taking of DNA / blood samples for roan antelope.

Further discussions regarding this critical issue can take place as needed and I welcome any suggestions to aid the industry.

All current suggestions has been made in the National Roan Protocol which DEA will publish at some stage.

Warm regards,

David Mark Paulse
Deputy Director
Biodiversity Management
Department of Environment and Nature Conservation

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Current suggested protocol 2014

Policy formulation

Potential code of conduct for the RAC (Roan Advisory Committee)

1. As a member of WRSA, I acknowledge WRSA's code of conduct as mandatory.
2. As a member of RAC, I subscribe to WRSA RAC Protocol, which stipulates that:
 - 2.1 Nuclear and mitochondrial DNA testing of Roan Antelope is the accepted method to distinguish between Southern and Western Roan;
 - 2.3 the DNA of all traded animals be tested, the animals be tagged and a certificate of integrity be issued;
 - 2.4 all hybrids of western roans found on my property or traded by me, be dealt with by RAC and DEA as they see fit;
 - 2.6 I duly accept the rulings and recommendations of the RAC management;
 - 2.7 I will keep and continuously maintain a stud register with test results and distribution of Roan Antelope;
 - 2.8 I will provide any information requested by WRSA and RAC.

Protocol

OBJECTIVES

1. The main objectives of the RAC are:
 - 1.1 to ensure and protect the genetic integrity of the indigenous Southern Roan (Hippotragus Equinus Equinus and Equinus Cottoni);
 - 1.2 to prevent the extinction of the indigenous Southern Roan and to increase their numbers in South Africa;
 - 1.3 to promote the distribution of the indigenous Southern roan to all regions of South Africa where the habitat will not threaten the survival or breeding of the sub-species;
 - 1.4 to achieve the above objectives in co-operation with the Department of Environmental Affairs and the provincial authorities.

Existing Protocol

2. Existing protocol dictates that DNA samples are taken of each clearly distinguishable animal (with ear tag and micro chip) in the presence of an official, or a TOPS veterinarian if an official could not be present. As soon as results are known and correct, the permit is issued for translocation of the animal.
 - 2.1 henceforth, every individual Roan Antelope being traded should undergo genetic testing and certified as pure southern before a permit is issued;
 - 2.2 breeders of indigenous Southern Roan whose animals underwent mitochondrial and nuclear DNA tests that confirm that such animals are genuine southern Roan Antelope (Equinus Equinus or Equinus Cottoni) and who are prepared to give an affidavit to this effect, will be accredited by the WRSA RAC committee.

- 2.3 for this purpose, the genetic material of each animal being traded must be collected, properly identified and sent to an accredited TOPS laboratory for DNA certification;
- 2.4 the tests results of each animal for sale, must be handed over to the buyer, the RAC and the auctioneer prior to every auction;
- 2.5 all Roan Antelope sold must be identified as such in accordance with the genetic sample. Should any animal prove to be a hybrid the RAC and DEA will deal with the matter as stipulated;
- 2.6 any such animal sold and found not to be a pure Roan Antelope, shall be returned to the seller immediately;
- 2.7 should an official not be present, a veterinarian may fill out in affidavit for every animal tested and submit results;
- 2.8 should a DNA test identify a hybrid or western roan, the owner shall inform nature conservation immediately in order to quarantine the herd until such time that all Roan Antelope on the property have been tested and their status verified to allow the separation of Southern, Western and hybrid Roans to prevent any further hybridisation breeding;
- 2.9 every Roan Antelope traded, must be identified with a micro chip of which the number must match the number of the DNA sample.
- 3. The buyer reserves the right to verify the micro chip and take additional blood samples if he/she wishes to do so, when loading the animals.
- 4. The implementation of the above-mentioned DNA testing is an added advantage and contributes to integrity of the Roan Antelope.
- 5. The RAC supports the need for the regulatory function of national and provincial conservation authorities with regard to fauna. Such regulations should focus on matters such as habitat, prevention of interbreeding and proper fences. This will contribute to:
 - 5.1 an increase in the number of indigenous Southern Roan Antelope;
 - 5.2 an increase in the gene pool;
 - 5.3 growing and sustainable profitability in breeding with roan antelope;
- 6. All provincial representatives of WRSA RAC accepted these principles, which apply at national level.
- 7. The implementation of the principles included in this Protocol will eliminate any uncertainties that existed previously about the sub-species of Roan Antelope, hunted or traded. It will contribute towards establishing trust and stability with respect to Roan Antelope in the industry.

THE WRSA RAC

- 8. The management comprises a chairperson, vice chairperson and nine elected members.
- 9. The main functions of the committee are to manage the affairs of the association in promoting the survival and integrity of indigenous Roan Antelope; co-operate with the management of WRSA; promote the interests of Roan Antelope breeders; ensure that the principles described in the Protocol are adhered to; and to act as mediator between breeders and the National Department of Environmental Affairs and provincial conservation authorities.

General

10. Because it is difficult to keep Roan Antelope in bomas it is necessary to develop a process to shorten the period between capturing and sample-taking of the animals and the outcome of the DNA test result. This will enable accredited Roan Antelope breeders to tranquilise animals once only and translocate animals while waiting for the DNA test result. Non accredited breeders will have to wait for the result before translocating animals.
11. The ideal situation would be to keep a database, in collaboration with nature conservation, of traded Roan Antelope and information about Roan Antelope breeders including the size and status of their studs.

