

**First Interregional Eastern Bongo Collection  
Workshop 14-15 May 2013  
Report**



**ALBUSTAN**  
ZOOLOGICAL CENTRE



**البستاق**  
مركز  
لاكثار الحياة البرية

# **First Interregional Eastern Bongo Collection Workshop Report**

Compiled by: David Mallon, Meyer de Kock, Kate Burns & Al Bustan Zoological Centre Management team.

Copyright © 2013 Al Bustan Zoological Centre

Recommended citation: Al Bustan Zoological Centre (2013) *First Interregional Eastern Bongo Collection Workshop Report*. Al Bustan Zoological Centre, Sharjah, UAE.

Cover photo: Meyer E. de Kock / Al Bustan Zoological Centre 2013

Reproduction of this publication for educational, conservation or other non-profit purposes is authorised without prior written permission from the copyright holder provided the source is fully acknowledged. Reproduction of this publication for sale or other commercial purposes is prohibited without prior written permission of the copyright holder.

## **Contents**

Foreword	4
Introduction	5
Eastern Bongo Status Summary	6
Wild population	6
Captive population	9
Global	9
Bongo in the Middle East	9
Interregional	11
Strategy	11
Threats	11
Vison and Goal	12
Objectives and Actions	12
Existing and planned in situ programmes	13
Acknowledgements	14
References	14
Photos	15
Appendix 1. List of Participants and Contributors	16
Appendix 2. Workshop Agenda	17
Appendix 3. Evaluation & feedback	18
Appendix 4. Organizations and websites	20

## Foreword

Scarcely more than one hundred wild Eastern Bongos exist in their natural habitat, threatened by poaching, snaring, forest degradation and encroachment. Strenuous efforts by the Kenyan authorities and conservation organizations have safeguarded the surviving populations and are leading to some small improvements, but the conservation status of this handsome and iconic antelope remains precarious.

In this situation, the relatively large numbers in captivity provide both insurance and the potential to produce stock for reintroduction at the appropriate time. Indeed, almost ten years ago 18 Eastern Bongo were transferred from the USA to reinforce the captive breeding group on Mount Kenya, within the original range of the species, and a second such repatriation is being planned. The animals sent to Kenya were contributed by several different collections and these operations demonstrate the value of cooperatively managed breeding programs, such as those in the USA and in Europe, and of supporting regional associations.

Up to now, Eastern Bongo collections in the Middle East, as well as in other regions, have been managed in an individual and fragmented manner. In the case of highly threatened species, every animal is important, but their value is greatly enhanced if managed as part of a collaborative program.

I am passionate about wildlife and conservation and I firmly believe that private collections such as Al Bustan Zoological Centre have a responsibility both to the animals they house and to the future of those species. The purpose of this workshop was to initiate cooperation on management and breeding of Eastern Bongo within the Middle East and to establish formal links with other regional breeding programs, with the ultimate aim of contributing to global conservation efforts.

This workshop only became possible because the owners of other collections agreed to participate, and I am very grateful to them for their support. I am also grateful to all the overseas participants for their willingness to travel long distances in order to participate - and for bringing a much-needed international dimension to the proceedings.

It is my sincere hope that this report will represent a positive contribution to the future of the Eastern Bongo. The challenge for us all now is to do what we can to implement the recommendations and priorities identified during the workshop and presented here.



H.E. Abdul Jaliel

Owner, Al Bustan Zoological Centre

## 1. Introduction

Bongos are large striking antelopes with a glossy brown coat and white stripes and distinctively shaped horns. Eastern or Mountain Bongo *Tragelaphus eurycerus isaaci* is one of two subspecies, the other being the lowland or Western bongo *T. eurycerus eurycerus*, which inhabits lowland tropical forests in West Africa and the Congo basin.

Eastern Bongo is endemic to a small area of montane forests in Kenya. It is classified as Critically Endangered on the IUCN Red List, the highest category of threat, due to a steep decline in range and numbers over the last 30 years (Antelope Specialist Group 2008). Eastern Bongo is larger and more brightly coloured than the lowland form. Eastern Bongo inhabit dense forest and thickets in steep mountains, which makes research difficult and several aspects of their basic ecology are still poorly known. Only around 100 are estimated to remain in the wild.

There is a much larger captive population, held in numerous collections around the world. Most of the captive bongo are found in Europe and North America where there are well-structured regional population and management strategies and support systems. Collections in other regions are mainly very small and are managed individually, as they are in the Middle East. To address this situation, the 1<sup>st</sup> Interregional Eastern Bongo Collection Workshop was organized by the Al Bustan Zoological Centre, Sharjah, UAE, and took place from 14 to 15 May 2013.

The aims of the workshop were to improve coordination of bongo management in the Middle East region, establish links with other regional collections, and explore ways of engaging with *in situ* conservation efforts.

The workshop was held in the Metropolitan Palace Hotel, Dubai and was attended by 25 participants, representing 10 institutions and organizations. Some of those invited were unable to attend but sent messages of support and /or contributed information. Appendix 1 contains a list of participants and contributors.

The workshop was formally opened by Mr Willie Labuschagne, Managing Director of Management of Nature Conservation and was moderated by David Mallon, Co-Chair of the IUCN / SSC Antelope Specialist Group. The format of the workshop followed the IUCN Species Conservation Strategy (SCS) process. The first part of the workshop consisted of a series of presentations to set the scene. The second part was devoted to developing a conservation strategy for Eastern Bongo in the Middle East. Appendix 2 contains the full workshop agenda.

The presentations were followed by an extended discussion on the main points raised. Information from the presentations was combined with published sources to provide a summary of the current status of wild and captive populations of Eastern Bongo (below).

List of presentations:

*Background to the 1<sup>st</sup> Interregional Bongo Workshop* - Meyer de Kock, Al Bustan Zoological Centre

*Bongo at Sheikh Butti Al Maktoum's Collection* - Alan Stephenson, Collection Manager

*Bongo at MNC* - Grant Furniss, Management of Nature Conservation

*Bongo at Al Bustan Zoological Centre* - Kate Burns, Al Bustan Zoological Centre

*Bongo in Riyadh Zoo* - summarized by Meyer de Kock

*Arabian Zoo and Aquarium Association* - Mark Craig, Al Ain Wildlife Park

*Veterinary diseases in the region* - Chris Lloyd, Al Bustan Zoological Centre

*Bongo in South Africa* - Dr Abeda Naidoo, National Zoo of South Africa

*Bongo genetics, EAZA and the EEP* - Dr Tania Gilbert, Marwell Wildlife

*Bongo collections in Florida, Bongo repatriation to Mt Kenya and the Bongo Surveillance Project*  
Dr Mark Davies, & Dr Paul Reillo, Rare Species Conservatory Foundation and Brandon Speeg, White Oak Conservation Centre

*Status of Bongo in Kenya* - Dr Charles Musyoki, Kenya Wildlife Service

## 2. Eastern Bongo: Summary of Status

### Wild population

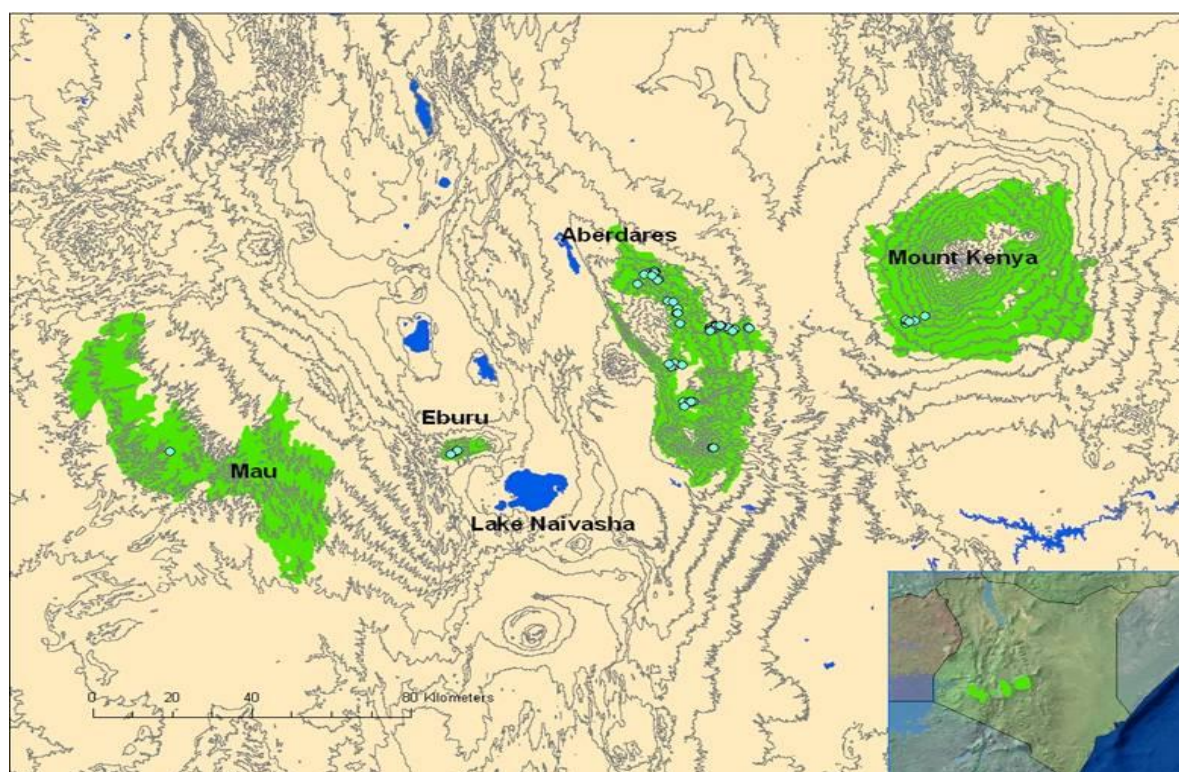
Wild bongos are now restricted to four sites: Aberdares National Park, Mount Kenya National Park, Eburu and Mau Forest (Fig. 1). Eastern Bongo are believed to have disappeared from former sites at Londiani and Cherangani. The present population is estimated to number 104 animals in total (Table 1). In 1975, an estimated 500 Bongo occurred in the Aberdares, where they were observed quite regularly at Treetops and Ark Lodge. Now only about 50 remain in that area. The last photograph of a wild bongo was taken in 1984 – until a small group was again photographed during 2011.

Table 1. Wild populations of Eastern Bongo in 2010 <sup>1</sup>							
Aberdares	Mt Kenya	Eburu	Mau Forest	Londiani	Cherangani	Mt Elgon	Total
Estimated numbers							
50	15	9	30	Locally extinct?	Locally extinct?	Presence Uncertain	<b>104</b>



The four remaining sites are surrounded by agricultural areas and other unsuitable habitat, which makes them increasingly isolated. Movement of animals between the sites is further restricted by fencing to prevent encroachment, poaching and other illegal activities. The Aberdares NP is now surrounded by 400 km of electrified fence that was completed in 2009. The eastern side of Mount Kenya is also fenced and plans to fence the other two sites, Eburu and Mau Forest, have been approved.

**Figure 1. Location of the surviving wild populations of Eastern Bongo in Kenya. Areas in green show the approximate extent of forest cover. Pale dots indicate records of recent bongo presence.**  
© KWS



### **Threats**

The principal causes of the decline since the 1970s are poaching and habitat loss. Bongo are hunted for their meat and skins using dogs and indiscriminate snaring for bushmeat is also widespread. Lions were introduced into the Aberdares in the 1970s and predation is believed to have had a negative impact on bongo. Many animals were live-caught for zoos and this may too have had a negative effect. The surviving wild populations are very small and fragmented which means they are intrinsically more susceptible to extinction from a range of random factors. Habitat loss and

degradation is a serious problem, particularly from illegal logging and charcoal production and agricultural encroachment.

### ***Conservation Measures***

Bongo are a flagship for the montane forest ecosystem of Kenya and Kenya Wildlife Service (KWS) set up the *National Bongo Conservation Task Force* to advise on bongo conservation and develop a national conservation strategy. The membership of the task force comprises KWS, Kenya Forest Service, Mount Kenya Wildlife Conservancy, Rhino Ark Charitable Trust, the Bongo Surveillance Project and other groups. A workshop with international partners to identify bongo conservation priorities was held in Nyeri in 2010 (CBSG 2010).

*The Bongo Surveillance Project (BSP)* was founded in 2004 to conserve bongo and its habitat and work with local communities (Prettejohn 2008). Teams of experienced trackers in each of the four sites monitor bongo presence and status through tracks and dung, and deployment of camera traps. Dung samples are collected for genetic analysis to assess the diversity of the surviving animals. Teams also monitor the extent of human activity in each site, remove traps and snares, and document poaching, charcoal production, illegal logging. GPS and satellite imagery are used to identify potential new areas of bongo habitat. Monitoring results indicate some very small improvements in bongo status in recent years and the number of snares destroyed is decreasing (BSP 2013). The BSP also cooperates with research scientists to understand bongo habitat selection, diet and ecology.

An important aspect of the work involves working with the local community and schools to establish Wildlife Clubs, and cooperate with communities to protect the forest for the benefit of both the Eastern Bongo and local people through projects such as tree planting, water catchment, agricultural initiatives and solar cooking and lighting technology.

### ***In situ captive population***

The Mount Kenya Game Ranch was established in 1967 as an education centre and a center for holding and transporting animals. When hunting and trade in wild animals were prohibited in Kenya in 1977-8, the 10 bongo (4:6) that were still present became the nucleus of a captive breeding herd. The *Mount Kenya Wildlife Conservancy* was formed to support bongo conservation and took over management. By 2004 captive bongo numbers had increased to 18 (8:10). In the same year, a further 18 animals (4:14) transferred from the USA to Mount Kenya in an operation coordinated by the Rare Species Conservatory Foundation and White Oak Conservation Centre and supported by several US institutions. One of the US females gave birth two days after arrival, but several repatriated animals died of theileriosis. The captive bongo herd on Mt Kenya has grown steadily and it numbered 68 (31:37) animals in May 2013. Over 300,000 Kenyan students have attended courses at MKWC so far.

After weaning, Bongo are moved to a secluded 40 ha enclosure sited in natural habitat along the Nanyuki River where human contact is kept to a minimum and the animals are encouraged to increase their reliance in natural browse in preparation for a possible future release. Issues of predator naivety, food naivety, and competitor naivety are to be incorporated into a future release protocol.



It is proposed to construct a second Bongo sanctuary in the Aberdares NP to house animals from a second repatriation of animals for the USA.

## Captive populations

### *Global*

In May 2013, 665 (238.404.23) Bongo in 44 institutions worldwide were registered in the international studbook (Bosley 2013). To these can added one young animal born at Al Bustan Zoological Centre in May 2013, just before the workshop began.

The international studbook for Eastern Bongo monitors breeding programmes so that sound choices can be made to trace ancestry and maintain breeding records. Most of the captive bongo are held in the USA and in Europe, with smaller numbers elsewhere (Table 2). About one third of the captive bongos in the USA are managed collectively under an AZA Species Survival Program (SSP) and most of those in Europe by an EAZA European Endangered Species Programme (EEP). These programs, together with the studbook, are designed to manage exchange of animals to maximize genetic diversity. Some bongos are held in zoos that do not contribute data to the International Studbook with more in private collections, including ranches in the USA. One of these contains around 70 individuals.

All bongos in captivity are descended from animals captured in the Aberdares, mainly in the 1970s-1980s. The number of founders was 29 in Europe, but genetic diversity remains high (91.6%) and the mean level of inbreeding is very low ( $F = 0.0800$ ). The US captive population had 36 founders and the level of inbreeding is also low in the USA. Quarantine and disease prevention regulations prohibit movement of animals into Europe and the USA from outside.

**Table 2. Eastern bongo captive numbers at May 2013**

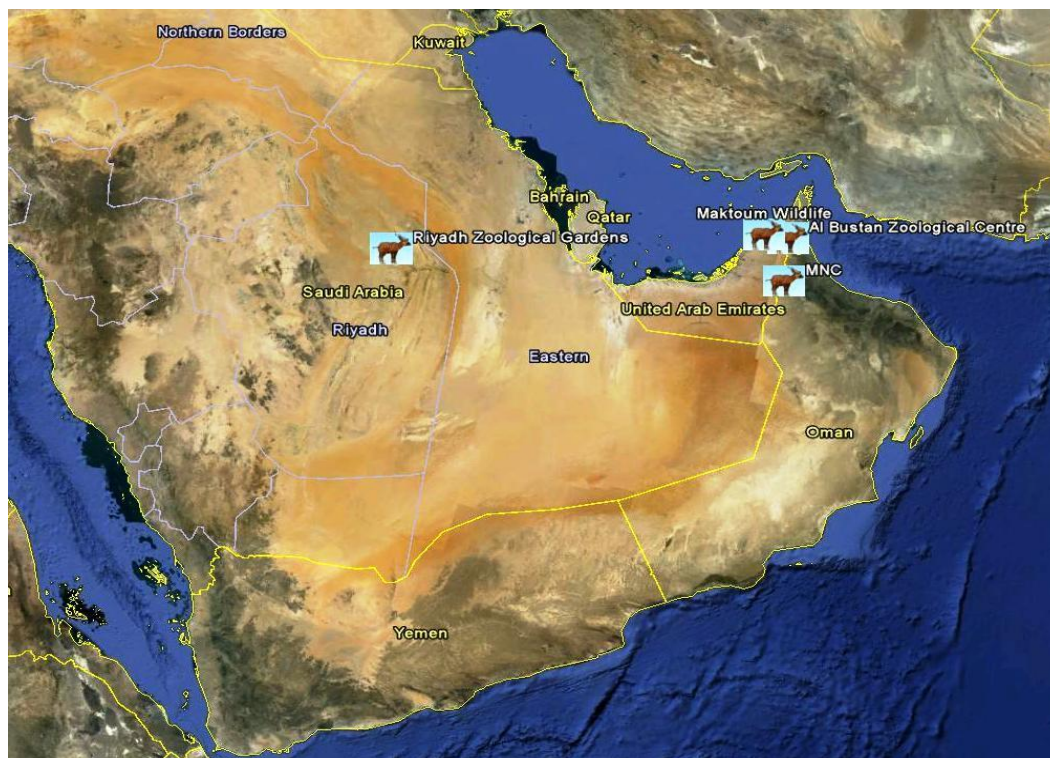
	<b>Total<sup>1</sup></b>	<b>Male</b>	<b>Female</b>	<b>Young</b>	<b>Institutions</b>
North America	338	123	193	22	58
Central America	2	2	0	0	1
South America	16	8	8	0	3
Europe	182	55	127	0	46
Middle East	23 <sup>2</sup>	9	14	0	4
Africa	74 <sup>3</sup>	31	43	0	3 <sup>3</sup>
Asia	22	6	16	0	3
Australia	8	4	3	1	4
<b>Global</b>	<b>665<sup>2</sup></b>	<b>238</b>	<b>404</b>	<b>23</b>	<b>122</b>
<sup>1</sup> Total regional populations, not managed population sizes					
<sup>2</sup> Plus one young born at Al Bustan May 2013					
<sup>3</sup> Includes Mt Kenya Conservancy					

### ***Bongo in the Middle East***

Four regional collections holding Eastern Bongo were represented at the workshop: Riyadh Zoo in Saudi Arabia and three privately owned collections in the UAE (Fig. 2, Table 3). Another private collection in UAE that recently acquired a group of six bongo has expressed interest in becoming part of the regional initiative. At least one other private collection in the region is also known to hold bongo.

Table 3. Eastern Bongo collections in the Middle East		
Collection	?	2013
MNC	8 (4.4.0)	8 (5.3.0)
Maktoum Wildlife	5 (3.2.0)	2 (0.2.0)
Al Bustan Zoological Centre	9 (3.6.0)	8 (2.5.1)
Riyadh Zoo	3 (0.3.0)	2 (0.2.0)
<b>Total</b>	<b>25 (10.15.0)</b>	<b>20/26 (7.12.1)</b>

**Figure 2. Location of Eastern Bongo collections in the Middle East**



The regional collections are all very small. Three out of four are declining and one is stable (Table 3). In fact, these groups of bongo are scarcely viable individually, hence the need for full cooperation in management, preferably through a regional plan.

The Middle East presents a challenging environment for keeping bongo, mainly due to the extreme heat, difficulty in obtaining suitable browse, and the prevalence of a wide range of diseases. Only a small number of infectious diseases have been reported from bongo in the region, but this may be the result of the small number of animals present. Malignant catarrhal fever, salmonellosis and BVD have been recorded. Bongo in regional collections have also died from fluorosis through contamination of feed, and fighting between males. Goitre and abomasal impaction have also been recorded here. A wide range of bacterial, viral and parasitic diseases are present in the Middle East, including foot and mouth disease, bovine tuberculosis and PPR. The high temperatures experienced in the Arabian Peninsula during most of the year leave only a short window (December–February) when animal movements can be undertaken safely, which adds further pressure and increases the need for careful planning and coordination.

The *Arabian Zoo and Aquarium Association* (AZAA) has recently been formed to increase collaboration and cooperation between zoos and animal collections in the region. Representatives from Bahrain, Jordan, Saudi Arabia, Qatar, UAE and Morocco attended an initial meeting at Al Ain Zoo and the 1<sup>st</sup> official conference is scheduled to take place in December 2013. The aim is for AZAA to become a fully accredited member of the World Association of Zoos and Aquariums by the time the WAZA conference takes place in Al Ain in 2015. Future activities include development of a standards and accreditation system.

### ***Interregional collections***

Several collections are located in Africa (2 in South Africa plus the breeding group in Mount Kenya Conservancy), Australia (4), Japan (2), Taiwan (1), Singapore (1) and Indonesia (1). Bongo numbers here are also small (Table y), presenting the same problems of viability and management. However, the absence of strict regulations on imports and exports of live animals means that cooperation and exchange of animals is more straightforward. One unfortunate illustration of the potential risks to very small captive groups comes from the National Zoological Gardens of South Africa, where in 2012, two bongo sheltering under a tree were killed by lightning, leaving only a solitary male.

## **3. Strategy**

The second part of the workshop concentrated on developing a strategy for the regional Eastern Bongo populations. Firstly, identified the main threats to bongo in the region, the underlying causes and constraints were identified by three working groups and these were then discussed and further refined by all participants.

### **Threats**

The main threats were grouped under the following headings

#### ***Demography and genetics***

- Regional populations are very small and probably not viable in the long-term on their own
- Parentage and pedigree information is often lacking
- Records have not been rigorously kept in all cases
- Quarantine regulations prevent movement of animals to some regions (Europe, USA)

### **Husbandry**

- Unsuitable climate (extreme heat)
- Difficulty in obtaining suitable browse
- High mortality of animals
- Low level of reproduction
- Stress factors with young / newborn
- Animal movements restricted to 3 winter months

### **Resources**

- High staff turnover
- Inexperienced staff
- Lack of sustainable finance
- Owner stability / commitment

### **Disease / Veterinary**

- Prevalence of a wide range of bacterial, viral and parasitic diseases in the region

### **Other constraints**

Underlying factors include a lack of environmental awareness / education; a low priority given to conservation in the region in general; no links to other regional collections or to *in situ* conservation.

### **Vision and Goal**

Next, a long-term vision and a shorter-term Goal for Eastern Bongo in the Middle East were formulated, again by working first in smaller groups then discussing and rationalizing these in a plenary session. Finally, a set of clear Objectives and Actions to address the main issues was agreed.

### **Vision**

*A viable Middle Eastern captive population of Eastern Bongo is maintained through collaboration within and outside the region and contributes to global species conservation efforts*

### **Goal**

*Manage the Middle East Bongo as a single regional population, work with interregional partners, and identify programmes that support in-situ conservation*

### **Objectives and Actions**

#### **Objective 1. Bongo management in the region is coordinated**

- 1.1. Set up a regional Eastern Bongo Working Group (ABZC, MWL, MNC, RZ) - *DONE*
- 1.2. Establish contact with other private collections holding bongo (*STARTED*)
- 1.3. Set up a regional Eastern Bongo website (ABZC) - *DONE*

#### **Objective 2. An Eastern Bongo Regional Collection Plan is developed**

- 2.1. Review historical data on the current population and establish pedigrees
- 2.2. Follow up outstanding records
- 2.3. Conduct a genetic analysis of regional populations
- 2.4. Carry out a Population Viability Analysis
- 2.5. Draft a collection plan in collaboration with the International Studbook, AZA and EAZA TAGs

- 2.6. Recommend actions for the short term (2013-2014) and (medium-term 2015-2018)
- 2.7. Have the RCP endorsed by the AZAA Species Management Programme

**Objective 3. Develop a regional husbandry manual**

- 3.1. Develop sections as available and publish on the EB website
- 3.2. Work with EAZA / EEP on latest information and analyses
- 3.3. Share best practice from within the region and outside

**Objective 4. High quality bongo husbandry is standardized**

- 4.1. Determine training needs
- 4.2. Set up an accredited training programme
- 4.3. Carry out reciprocal training / exchange programmes
- 4.4. Establish and maintain record keeping standards

**Objective 5. Interregional collaboration is established**

- 5.1. Link the EBWG to National Zoological Gardens, South Africa
- 5.2. Establish links through regional associations and other institutions

**Objective 6. Engage with *in situ* conservation efforts**

- 6.1. Work with KWS, BSP, and other partners to identify suitable programmes

**Existing and planned *in situ* projects and estimated costs (all priorities under the current national Bongo Action Plan)**

***Bongo Surveillance Programme*** (Operational costs -USD 100,000 / year)

- Monitoring team support
- hardware (camera traps, GPS, personal equipment)
- consumables (batteries, other)
- Staff costs
- KWS support
- Vehicle and helicopter costs
- Data collection and collation
- Education and awareness
- Wildlife clubs in schools
- community outreach

***Construction of new sanctuary*** (USD 500,000 3:1 capital / operational costs)

- Fencing
- KWS Station
- Bomas
- Running costs
- Security
- Veterinary care

***Repatriation of 25 bongo (7.18) from the USA*** (USD 450,000)

- Air charter (280,000)

- Pre-quarantine at White Oak Conservation Centre (c. 60,000)
- Transport within USA (15,000)
- Post-quarantine (20,000)
- Staff costs (50,000)
- Miscellaneous overheads (25,000)
- Animals are donated free

## Acknowledgements

We express our sincere thanks to HE Mr Abdul Jaliel Al Blouki, owner of Al Bustan Zoological Centre for supporting the workshop and his encouragement throughout. Thanks are also due to Meyer de Kock, Manager AZBC and his staff, in particular Lizl de Klerk who was responsible for most of the administrative arrangements, Kate Burns, Rozaan de Kock and Donovan de Boer for the organization and logistical arrangements. Finally we thank all the workshop participants, and their host organizations, for committing the time to attend the workshop and for their active contributions.

## References

Bosley, L. F. 2011. International Studbook for Eastern / Mountain Bongo (*Tragelaphus eurycerus isaaci*). Year 2011 Edition. Vol XXVI.

Bongo Surveillance Project 2013. Update March 2013. [www.mountainbongo.org](http://www.mountainbongo.org)

CBSG 2010. Mountain Bongo Conservation Workshop Report. 26-28 July 2010, Nyeri , Kenya .

IUCN/SSC Conservation Breeding Specialist Group, Apple Valley, MN.

IUCN SSC Antelope Specialist Group (2008). *Tragelaphus eurycerus* ssp. *isaaci*. In: IUCN 2008. IUCN Red List of Threatened Species. Version 2013.1. Available: [www.iucnredlist.org](http://www.iucnredlist.org). Downloaded on 17 May 2013.

Prettejohn, M. (2008). On the trail of the Mountain Bongo. SWARA 31(Jan-Mar 2008).



## Photos





## Appendix 1. List of participants and contributors

### THE 1<sup>ST</sup> INTER-REGIONAL EASTERN BONGO COLLECTION WORKSHOP

14 – 15 May 2013



Organisation:	Representative:	Position:	Country:	
IUCN	Dr. David Mallon	Facilitator	UK	<a href="mailto:d.mallon@zoo.co.uk">d.mallon@zoo.co.uk</a>
Marwell Wildlife	Dr. Tania Gilbert	EEP Co-ordinator	UK	<a href="mailto:TaniaG@marwell.org.uk">TaniaG@marwell.org.uk</a>
Kenya Wildlife Service	Dr. Charles Musyoki	Senior Scientist	Kenya	<a href="mailto:cmusyoki@kws.go.ke">cmusyoki@kws.go.ke</a>
Rare species Conservatory Foundation	Dr. Paul Reillo	Founder and President	USA	<a href="mailto:paulreillo@rarespecies.org">paulreillo@rarespecies.org</a>
CCTU/RSCF	Dr. Mark Davis	Veterinarian	USA	<a href="mailto:mdavisvet@gmail.com">mdavisvet@gmail.com</a>
White Oak Conservation Center	Mr. Brandon Speeg	Conservation Coordinator	USA	<a href="mailto:bspeeg@wogilman.com">bspeeg@wogilman.com</a>
AZAA	Mr. Mark Craig	AZAA representative	UAE	<a href="mailto:mark.craig@awpr.ae">mark.craig@awpr.ae</a>
MNC	Mr. Willie Labuschagne	Director	UAE	<a href="mailto:willie@ewbcc.ae">willie@ewbcc.ae</a>
MNC	Mr. Grant Furniss	Population management officer	UAE	<a href="mailto:grantfurniss@gmail.com">grantfurniss@gmail.com</a>
MNC	Mr. Praveen Kumar	Senior Laboratory Technician	UAE	<a href="mailto:praveen@ewbcc.ae">praveen@ewbcc.ae</a>
MNC	Mr. Peter Arras	Ungulate curator	UAE	<a href="mailto:peterarras@arcor.de">peterarras@arcor.de</a>
MNC	Dr. Anas Idris	Head of Research	UAE	<a href="mailto:aidris@ewbcc.ae">aidris@ewbcc.ae</a>
MNC	Dr. Pathan	Head of Veterinary Services	UAE	<a href="mailto:dr_pathan@hotmail.com">dr_pathan@hotmail.com</a>
Sheikh Butti	Mr. Alan Stephenson	Manager	UAE	<a href="mailto:alanuae2008@gmail.com">alanuae2008@gmail.com</a>
National Zoological Gardens	Dr. Abeda Dawood	Collections manager	RSA	<a href="mailto:abeda@nzg.ac.za">abeda@nzg.ac.za</a>
NASVH	Dr. Chris Lloyd	Veterinarian	UAE	<a href="mailto:chris@nadvethosp.com">chris@nadvethosp.com</a>
Al Ain Zoo	Mr. Myyas Al Qarqas	Animal Collection Manager	UAE	<a href="mailto:myyas.alqarqaz@awpr.ae">myyas.alqarqaz@awpr.ae</a>
Al Bustan Farms	Miss Heidi May	Manager	UAE	<a href="mailto:albustanfarms1@gmail.com">albustanfarms1@gmail.com</a>
Al Bustan Zoological Centre	Mr. Meyer de Kock	Manager	UAE	<a href="mailto:bustan55@eim.ae">bustan55@eim.ae</a>
Al Bustan Zoological Centre	Miss Kate Burns	Vet nurse & Antelope curator	UAE	<a href="mailto:kate@albustanzoo.ae">kate@albustanzoo.ae</a>



## Appendix 2. Workshop Agenda

### THE 1<sup>ST</sup> INTER-REGIONAL EASTERN BONGO COLLECTION WORKSHOP

14 – 15 May 2013



MON: 13

TUES: 14

WED: 15

	<b>7:30</b>	<b>7:30</b>
	Breakfast @ hotel	Breakfast @ hotel
	<b>8:30</b>	<b>8:30</b>
	Registration at Metropolitan Palace Hotel – Welcome coffee/tea	<b>WORKSHOP STARTS</b> at Metropolitan Hotel <ul style="list-style-type: none"> <li>Population Management finalization</li> </ul>
	<b>9:00</b>	
	<b>WORKSHOP STARTS</b> at Metropolitan Hotel Opening <ul style="list-style-type: none"> <li>Mr. Willie Labuschagne (15min)</li> <li>AAZA</li> <li>ABZC</li> </ul>	
		<b>10:00 – 10:30</b>
		Coffee/Tea break
	<b>10:30 – 11:00</b>	<b>10:30</b>
	Coffee/Tea break	<ul style="list-style-type: none"> <li>Opening: Dr. Chris Lloyd</li> <li>Future vision &amp; possible re-introduction (10min each)</li> <li>IUCN – RSG</li> <li>KWS</li> <li>White Oak</li> <li>Rare Species Conservatory Foundation</li> </ul>
	<b>11:00</b>	
	<ul style="list-style-type: none"> <li>Dr. David Mallon – Facilitator Introduction</li> <li>Bongo population in current collection (5min for each institution)</li> <li>EEP – Dr. Tania Gilbert</li> </ul>	
		<b>12:30</b>
		<ul style="list-style-type: none"> <li>Closing – Dr. David Mallon</li> </ul>
	<b>13:00</b>	<b>13:00</b>
	Lunch at Khalidia Hotel	Lunch at Khalidia Hotel
	<b>14:00</b>	<b>14:00</b>
	<ul style="list-style-type: none"> <li>Vision</li> <li>Collection Plan</li> </ul>	Bus departure from Khalidia Hotel
	<b>15:30</b>	
	Coffee/Tea break	
	<b>16:00</b>	<b>16:00</b>
	<ul style="list-style-type: none"> <li>Current population structure</li> <li>Collection Plan – Part 2</li> </ul>	Al Bustan Tour
<b>17:00 – 18:00</b>		
Registration Khalidia Hotel Apartments	<b>18:00</b>	<b>18:00</b>
<b>18:45</b>		Dinner at Al Bustan
Bus departure from Khalidia Hotel		
<b>19:00</b>	<b>19:00</b>	<b>19:00</b>
Ice-breaker dinner at Jigsaw Restaurant – Movenpick Hotel, DEIRA	Free night	
<b>20:00</b>	<b>20:00</b>	<b>20:00</b>
		Bus returns to Khalidia Hotel ETA: 21:00

### Appendix 3. Evaluation and feedback

**The following feedback was received:**

#### **Hotel stay and service**

☐ Unsatisfactory      ☐ Satisfactory      33% Good      76 % Excellent

#### **Conference room setup**

☐ Unsatisfactory      ☐ Satisfactory      33% Good      76 % Excellent

**How do you rate the topics covered in the workshop?**

☐ Unsatisfactory      ☐ Satisfactory      62 % Good      44 % Excellent

**Which topic(s) were you most interested in & why?**

- Husbandry Presentations
- In-situ presentations & Working Groups
- Collections & Regional Populations
- Captive Breeding
- Mortality & Feeding issues
- In-Situ programmes & investment
- Current population in Kenya
- White Oak success stories
- Population genetics
- Disease
- Future vision & possible re-introduction
- Possible collaboration with other institutions outside the Middle East.

**Which topic(s) would you have liked to discussed more & why?**

- Strategies to engage private collection owners directly in conservation process
- More time to formulate an action plan
- Inter Zoo collaboration in the Emirates to create forum for discussion of matters
- Bongo in captivity in North America – Why exceeding numbers in the wild & lessons learned

**Which other topics do you think should be covered by the workshop?**

- Set-up a regional dedicated facility for only Bongo
- Husbandry overview Q & A

- Infant mortalities and milk formula for hand rearing
- Natural history & relevance to captive populations
- Diet & Feeding
- International collaboration in Eastern Bongo Conservation genetic status

**Were the 2 days sufficient to get an overview of the Bongo Workshop?**

88 % Yes

12 % No

**Suggested timeframe to next workshop**

44 % Yearly

56 % every 2 years

☐ 2+

**Do you recommend any other Individual or Organization to be invited to the next workshop?**

- Rhino Ark & BSP
- Other private collections in the region
- Geneticist
- Abu Dhabi Environmental Agency
- Nutritionist
- Veterinarians & Researchers

**Any other comments or recommendations:**

- More time for opened decisions
  - Less group work more open forum
  - Can alternate visits to other Bongo owners
  - Develop & Package awareness materials for Zoo owners
  - Enlist international stakeholders
  - Turn discussion into ACTION.
-

## Appendix 4. Organizations and websites

<http://www.easternbongo.org>

This website was created as an identified need by the workshop holders. This website goal is to share as much information about captive Bongo management and conservation efforts in- & ex- situ. This website was sponsored and developed by Al Bustan Zoological Centre.

<http://www.mountainbongo.org/> Bongo Surveillance Project.

<http://www.rare-species-conservation-centre.org/> Rare Species Conservatory Foundation

<http://www.iucnredlist.org> IUCN Red List of Threatened Species

<http://www.wocenter.org/> White Oak Conservation Centre.

<http://www.awpr.ae/> Al Ain Zoo

<http://www.kws.org> Kenya Wildlife Service

### Partners:

