

**Provisional Project Title: Mountain Bongo Antelope Repatriation and Reintroduction, Phase II**

**Proposed Duration:** 24 months

**Geographical Location:** Mt. Kenya World Heritage Site, Kenya

**Proposing UN Agency:** UNDP

**Contact:** (Carmen Tavera, SGP, Paul Reillo RSCF)

**Project Partners:** (UNDP, UNOPS, RSCF, GEF/SGP, Donner Canadian Foundation, Calgary Zoological Society), Gilman International Conservation

**National Counterpart Institutions:** Kenya Wildlife Service (KWF), Kenyan universities, MKGR

**Estimated Project Budget/Cost:** \$815,000 over two years

**Proposed UNF/UNFIP Funding:** 300,000

I. Background and Analysis

1. Problem Statement and Justification

On 29 January 2004, 18 mountain bongo antelope were repatriated from US zoos and conservation centers to Mt. Kenya. These bongos are founders for a long-term breeding and management effort at the Mt. Kenya Game Ranch (MKGR) whose descendants will be gradually acclimated to the wild. Ultimately, the bongo initiative seeks to restore a sustainable wild population within the Mt. Kenya World Heritage Site. The first phase of this initiative, which culminated with the successful transportation and release of the animals into fenced enclosures at MKGR, requires immediate follow up both to monitor the animals' adaptation to their new environment and to ensure the physical and program infrastructure for their eventual release into the wild. Phase II builds upon the significant partnerships forged during Phase I, which include U.N. agencies, UNF, Canadian and U.S. zoological institutions and conservation organizations, the Kenyan government, and other donors and partners. Phase II will seek to expand these partnerships—in particular by attracting additional NGOs and Kenyan academic institutions.

II. Objectives and Strategy

1. Objectives

Phase II of the bongo project will address field research, animal monitoring and preparation of transitional habitat for the growing bongo population. This phase will also continue program development and awareness-raising activities initiated during Phase I.

Ecological Research

Central to any successful reintroduction strategy is a comprehensive understanding of the ecological requirements for the target species, which in this case is complicated by the bongo's absence from Mt. Kenya since 1994. During Phase II, fundamental ecological research will focus on proxy species (e.g., forest-dwelling eland) and remnant bongo populations in the Aberdares to elucidate the habitat needs for Mt. Kenya bongo, so that appropriate sites for reintroduction can be delineated.

Field research will address all aspects of vegetation ecology, from species-specific nutritional content to geographic landcover classification (e.g., distribution and abundance of plant species via Geographic Information Systems [GIS]). In addition, behavioral studies with the MKGR population and telemetry-based research with the Aberdares population will enable contemporaneous comparison of habitat utilization and browsing preference and behavior.

### Animal acclimation follow-up

The bongo population at MKGR must be studied intensively to assess acclimation (e.g., browsing behaviors, plant palatability, environmental tolerance). A comprehensive veterinary and husbandry program was initiated during Phase I, which will need to continue during Phase II, engaging KWS and local veterinary support alongside international veterinary and husbandry teams. As the MKGR bongo population grows, special husbandry and veterinary needs will arise, especially as animals are introduced into transitional habitat adjacent to the Mt. Kenya National Forest and National Park. A robust, descendant bongo population is necessary to sustainably introduce animals to increasing wild areas and ultimately into the World Heritage Site.

### Establishment of habitat corridors

During Phase II, areas of suitable habitat will be fenced to enable bongo managed at MKGR to be transitioned into increasingly wild environments within the National Forest and World Heritage Site, upslope from MKGR. These habitat corridors will permit KWS to manage and research essential forest areas over the long term, preparing them for a sustainable wave of bongo reintroductions, generation after generation. Most of the corridors have already been delineated by KWS staff, and follow natural boundaries, existing fencelines, or topographical contours. Some of these managed areas will have the features of existing bongo enclosures at MKGR, including gates, feeding and observation stations and electrified perimeters (for elephant deterrence), while others will simply be fenced alleyways to facilitate movement of animals from one area to another.

### Awareness raising

Phase II will continue awareness raising activities started under Phase I and will mainstream as much as possible the bongo-related aspects into overall Mt. Kenya conservation efforts. All ongoing, SGP-based community initiatives have direct or indirect ties to environmental awareness and conservation education within the World Heritage Site, and the bongo project provides effective “branding” of such efforts, leveraging specific activities (e.g., bee-keeping, trash-dump management, school outreach programs, women’s agricultural incentives) toward conservation of this conspicuous flagship species and the umbrella Mt. Kenya ecosystem. In addition, the William Holden Foundation will broaden its educational campaign about the bongo to reach a local and regional constituency of all ages. These outreach components will help explain to the public both background ecology of the bongo and Mt. Kenya forest, as well as present ongoing and future efforts to reintroduce bongo and protect the World Heritage Site.

## 2. Key activities/anticipated results

### Ecological Research

- Research fellowship to one international and two Kenyan post-graduate students
- Research protocols/plans development
- Conduct research in the Aberdares , Mt. Kenya, and at MKGR

The expected immediate results include development of an ecological model for habitat utilization by bongo in Mt. Kenya WHS and delineation of suitable habitat/land for bongo reintroduction. Research will be coordinated among participating NGO’s, universities and KWS. Capacities of Kenyan scientists and institutions focusing on wildlife management issues are increased.

### Animal acclimation follow-up

- Maintain veterinary program at MKGR and integrate with KWS and local veterinary services

- Maintain comprehensive husbandry program for managed population at MKGR and within transitional habitats
- Prepare managed population for introduction into transitional forest on KWS land
- Document acclimation progress

The immediate results include ensuring optimal animal health of the growing bongo population and increasing understanding of the acclimation process and associated risks. All veterinary, husbandry and management program components will be coordinated between governmental and NGO counterparts, promoting Kenyan capacity development.

#### Preparation of transitional forest and establishment of habitat corridors

- Management areas and corridors delineated and mapped
- Vegetation analysis using GPS and GIS
- Ten kilometers of hi-tensile game fencing installed to link current bongo enclosure with Mt. Kenya National Park and National Forest Reserve land under KWS administration.

The immediate result is a complex of managed areas fenced to transition the bongos and their offspring into increasingly wild environments, all under KWS control. This physical infrastructure provides the means to sustainably introduce future generations of bongo into National Forest and the World Heritage Site, while also enabling KWS to manage and protect forest areas adjacent to MKGR and the existing bongo breeding/management enclosures. The fencing initiative will employ local laborers, and help empower KWS by shifting control of the growing bongo population and its requisite habitat into government hands.

#### Awareness raising and mainstreaming

- Dissemination of information on current activities and future plans for the bongo among local communities and the national public
- Mainstreaming the bongo reintroduction into the Mt. Kenya National Park Management Plan
- Involving related agencies and programs, and cultivating local donors to participate in the bongo initiative

Immediate, measurable results include a broader scope of educational materials and media outlets for the local and regional public, greater integration of existing community-based activities into immediate bongo initiatives, and a broader base of financial and technical support for the overall bongo program. In addition to cultivating new lines of support within the Mt. Kenya Donor's Forum and related partners, Phase II seeks to recruit new, international NGO partners and funders, thereby augmenting the *ex-situ* base of support for future program development and financial leverage.

### 3. Target Beneficiaries

The primary beneficiary of Phase II of the bongo program is the Kenya Wildlife Service and in particular the Mt. Kenya National Park KWS group. Their increased involvement will significantly enhance capacity in all aspects of wildlife management, wildlife veterinary care, and conservation program design. While the bongo antelope is the immediate conservation target, each activity described in Phase II benefits a myriad of other forest species within the Mt. Kenya ecosystem, thereby complementing KWS's current portfolio of wildlife projects.

Other direct beneficiaries of the project are students and their affiliated universities engaged in ecological field research, local MKGR staff, and locals employed to develop the physical infrastructure for the transitional habitats and corridors. As Phase II unfolds, participants will work together under KWS's broad management umbrella, promoting a novel, long-term conservation program architecture.

Indirect beneficiaries are local populations and other private and public institutions in the Mt. Kenya area, all of whom benefit tangibly from the attention generated by the bongo initiative (e.g., increased tourism, increased funding made available for conservation and sustainable livelihoods, workforce development). In addition, the educational and outreach components of the program inspire environmental consciousness that benefits nature and people alike, promoting positive attitudes and behaviors that increase quality of life.

#### 4. Programme Strategy

The Mt. Kenya National Park and World Heritage Site is of strategic importance to local communities, Kenya, and the world's biodiversity inventory. It represents one of Africa's most biologically diverse forest ecosystems, and despite its scale, also has become the focus of intense international conservation concern because of its insular island qualities. In terms of diversity per unit area, species endemism, and degree of threat, the Mt. Kenya World Heritage Site is one of the top biodiversity protection priorities in the world. The Kenyan government's progressive approach to protecting Mt. Kenya's forests, coupled with the recent successful repatriation of the bongo antelope, demonstrate the efficacy of ecosystem-level conservation leverage afforded by a flagship species focus. The bongo program is globally conspicuous, innovative in philosophy and methodology, and, most importantly, has been embraced wholeheartedly by all stakeholders in the Mt. Kenya area, and conservation groups worldwide.

Phase II of the bongo program serves the UNF/UNFIP structure well by strengthening the diverse array of partnerships established during Phase I, and by significantly empowering Kenya's wildlife governing authorities to carry the reintroduction campaign forward. Further, the high-profile nature of the project stimulates collaboration of international NGOs, local public and private sector organizations, academic centers, multilateral grantors and donors, and the general public, underscoring the founding philosophies of WSSD and UNF.

Phase II capitalizes on the tremendous momentum and success of Phase I, immediately addressing an array of visible, physical infrastructure needs, vital Kenyan staff capacity building, and essential ecological research. Phase II represents the critical, next step toward developing a sustainable conservation model for the Mt. Kenya World Heritage Site and ensuring the return of Kenya's most famous forest ambassador to the wild.

### III. Programme Management and Implementation

#### 1. Modality/Institutional Arrangements

Phase II will be implemented by the GEF SGP on behalf of UNDP. The project will be primarily administered via the UNDP Kenya office in collaboration with KWS, with UNOPS handling contract arrangements and materials procurements for UNDP and partnering agencies in Kenya (e.g., fencing materials and supplies). In addition, as specified in Phase I, RSCF will serve as a direct contractor to UNDP, and will act as a consultant to oversee animal care aspects of the project and liaise with KWS, researchers, and other participating agencies and organizations on all other matters. As KWS is the Kenyan authority for protected areas and wildlife management, it is the key instrument through which the

project will be implemented. All project partners collaborated excellently during Phase I and have expressed their full commitment toward Phase II.

## 2. Monitoring/Evaluation

UNDP will be responsible for implementation progress follow-up on a monthly basis to ensure that all activities are proceeding as planned. UNDP will be responsible for progress and financial reports in accordance with the MOU with UNFIP, including:

- Annual progress report, due within 45 days of the end of the year
- Final project report—a narrative to be submitted by UNDP to UNFIP within 90 days of project completion
- Semi-annual financial utilization reports—UNDP will submit to UNFIP within 45 days after the end of the reporting period
- Final expenditure report—UNDP will provide UNFIP with a final certified or audited statement within 12 months following project completion.

UNDP will coordinate all administrative and on-the-ground activities closely with the RSCF and KWS, to ensure swift communications about project deliverables, expenditures, and any potential problems. Note: A concept paper outlining the development and implementation of Phase III (bongo reintroduction) will be submitted along with the final narrative report.

## IV. Budget and Funding Arrangement

### 1. Preliminary Programme Budget

<b>Fencing:</b>	Per Kilometer: Hi-tensile game fencing (Stay-Tite)	\$3000	
	Treated Gum Posts	\$5000	
	Fence Hardware	\$750	
	Local labor to clear fenceline and Install fence	\$14,250	
	Total cost of fence per kilometer	\$23,000	x 10 km = <b>\$230,000</b>
	Grids/gates/feeders/water lines:		<b>150,000</b>
	Electrifying perimeters (as necessary):		<b>75,000</b>
Installation tools:		<b>5,000</b>	
Materials storage for KWS:		<b>15,000</b>	
<b>Veterinary/Husbandry Services Support:</b>			
	KWS assigned veterinarian:	\$20,000/yr x 2 years =	<b>40,000</b>
	Vet/husbandry materials and supplies:	\$10,000/yr x 2 years =	<b>20,000</b>
	International vet visits (2 trips/yr)	\$10,000/yr x 2 years =	<b>20,000</b>
<b>RSCF Consultant/Program Service:</b>			
	Travel and support in Kenya (3 trips/yr)	\$15,000/yr x 2 years =	<b>30,000</b>
	Administrative/materials support	\$10,000/yr x 2 years =	<b>20,000</b>
<b>Research support:</b>			
	International student, support, travel, research fees:	\$35,000/yr x 2 years =	<b>70,000</b>

2 Kenyan students, support, travel, research fees:  $2 \times \$35,000/\text{yr} \times 2 \text{ years} =$  **140,000**

**PRELIMINARY PROGRAM BUDGET TOTAL: \$815,000**

2. Prospects of Additional Funding

Core funding for Phase II is anticipated from the Donner Canadian Foundation and Calgary Zoological Society, as utilized for Phase I. In addition, RSCF and partnering NGOs (e.g., Gilman International Conservation, WCS) expect to co-develop funds for UNF match from U.S. and international sources, collaborating with the William Holden Foundation, J.C. Trust, Peace River Center for Conservation of Tropical Ungulates, IUCN SSC Antelope Specialist Group, and several private foundations and donors. The American Zoo and Aquarium Association (AZA), whose Species Survival Program (SSP) helped stimulate the donation of animals and/or funds from 13 zoos and conservation centers in the U.S., will continue to campaign for annual support for Phase II and beyond. Bi-lateral funding and co-development is expected via the UNDP Kenya office, Mt. Kenya Donor's Forum, and other interested organizations and parties already invested in natural resource programs in east Africa.