



2015 ANNUAL REPORT

THE HIROLA CONSERVATION PROGRAMME (HCP)

A LETTER FROM OUR DIRECTOR AND FOUNDER

I started the Hirola Conservation Programme (HCP) in 2008 with the mission to save hirola from extinction. This was in response to a request from the local communities in Garissa County following my recruitment in the hirola management committee in 2005. The purpose of this committee was to initiate a long-term hirola conservation effort in north-eastern Kenya. It was at this time that I developed a popular community-based wildlife conservation programme that employed multiple but parallel pathways to curb ongoing hirola declines.

More than a decade later, the programme has grown from a small local group to an award winning conservation organization with a long-term vision of saving hirola in -eastern Kenya. One of our key strengths and source of success is the fact that HCP is unique in promoting all-inclusive locally driven conservation of hirola in partnership with Somali pastoralists. Moving forward, we aim to reach out, collaborate, and share with other stakeholders interested in hirola conservation including the local government and external conservation enthusiasts.

In particular, 2015 was a very successful year for the hirola conservation programme. This year saw the inclusion of more community participation, numerous anti-poaching trainings, conservation awareness in schools and more scouts and herders joining the programme. Since inception, our programme has valued the importance of science in our endeavours, as a consequence, we employ evidence based approach in our conservation efforts. We concluded the first phase of four years of hirola research and submitted our finding for publication in top ecological journals.



While science guides our strategy, our effort would not have been possible without the passion and dedication of numerous individuals locally, nationally and internationally. In this regard, I would like to thank our supporters and collaborators for their enthusiasm and unwavering support. While we have made several gains in the recent past in protecting hirola, the battle is far from over and therefore, we are cautiously optimistic to restore free ranging hirola populations in the years ahead. Together, we can save the world's most endangered antelope from extinction.

Sincerely,

A handwritten signature in black ink, appearing to read 'Abdullahi H. Ali'. The signature is fluid and cursive, with a large loop at the end.

Abdullahi H. Ali, Ph.D
Founder & Director

OUR MISSION

To protect and increase the numbers and distribution of hirola through participatory conservation, education, community involvement and international support. We recognize that conservation is a multi-stakeholder initiative and does not occur in isolation.



Major Threats and Conservation Actions

A combination of habitat degradation, competition with livestock and disease are responsible for historic declines, with habitat degradation and predation combining to suppress contemporary populations. The Tsavo population additionally faces predation by relatively high densities of large carnivores and competition from a greater variety of other wild herbivore species (but much lower numbers of cattle) than in its natural range.

Recommendations for the long-term conservation of the hirola in Kenya have been included in the recent hirola strategy. Some of the management recommendations include improving the level of management and protection of the natural population of hirola, particularly in the Arawale National Reserve and the establishment of new protected areas in Gababa and Galmagalla areas. In addition, there's need to improve local livelihoods and engaging communities through education and outreach.

OVERVIEW OF THE HIROLA CONSERVATION PROGRAMME



The Hirola Conservation Programme (HCP) is a non-governmental organization based in Garissa County in north-eastern Kenya. HCP is primarily dedicated to promoting the conservation of the endangered hirola antelope (*Beatragus hunteri*) in the world. Towards this, HCP commits itself to improving hirola's habitat in partnership with the local pastoralist groups.

The main goal of HCP is to establish and sustain a conservation programme that will make a lasting contribution to the future of hirola antelope and also the livelihoods of the local communities living within hirola's geographical range.

One of the key concerns for conservation of hirola antelope is that, their population has declined from approximately 15,000 individuals in the 1970s to between 300 and 500 individuals currently. That is why our programme focuses on in situ conservation within the species historic geographical range to ensure that we achieve our objective in partnership with local communities.

Hirola populations have declined from approx. 15,000 to between 300 & 500 currently.



Specifically, for long-term monitoring of this critically-endangered species, the programme intends to protect and increase the numbers and distribution of hirola through local participatory conservation, education, and international support in north-eastern Kenya.

Core functions

A) Conservation

Our conservation efforts are threefold:

- 1) The protection and restoration of habitat for the endangered hirola antelope
- 2) Anti-poaching programme for hirola, elephants and other wildlife and,



Hirala populations have declined from approximately 15,000 individuals in 1970 to between 300 and 500 individuals currently.





“Our main goal is to establish and sustain a conservation programme that will make a lasting contribution to the future of hirola antelope and also the livelihoods of the local communities living within hirola’s geographical range.”

3) Capacity building and technical advice to both local government officials and local groups.

B) Research

Our research programme is a locally supported conservation research effort that aims at understanding the underlying factors influencing hirola declines and to explore the best management interventions to improve their population. In particular, our research work focuses on the hirola range collapse, habitat use, and the effects of land-use change in north-eastern Kenya.

In addition, we are conducting participatory research with local communities to better understand social factors that are affecting the

future conservation of hirola in the region. These are knowledge gaps that we have consistently identified and prioritized for hirola conservation.

Our research work focuses on hirola range collapse, habitat use and the effects of land-use change in north-eastern Kenya

We employ GPS telemetry using Vectronic GPS PLUS collars, analysis of long-term satellite imagery, mark-resight and sight-resight analyses to gather information and understand the demographic drivers of hirola declines. GPS-telemetered individuals are enabling us to collect data on habitat selection and demographic dynamics of this unique antelope

**Our research work
focuses on hirola
range collapse,
habitat use and the
effects of land-use
change in north-
eastern Kenya**





HCP visits primary and secondary schools within the hirola range to educate students on the plight of hirola and also organise sensitization sessions in villages where we engage women, men and youths on conservation issues.

C) Education

The hirola conservation programme conducts an intensive outreach programme consisting of lectures, video shows, and public discussions on hirola conservation. We also conduct educational seminars, meetings and workshops in the villages within the range. We work with local elders in each village and the local leaders to facilitate the availability of meeting venues and also to bring people together.

D) Network and partnership for hirola

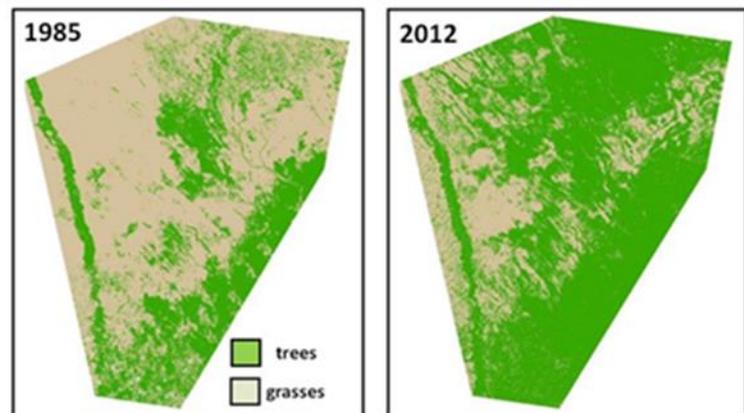
To strengthen our work, we recently partnered with a number of international organisations that provide direct support to hirola conservation programme. These include; People's Trust for Endangered Species, Rufford Foundation, Houston Zoo and the Garissa County Government, Kenya. We anticipate to approach more other organizations for new partnerships and to enable us achieve our long-term conservation goals

RANGE DEGRADATION IS POISED TO CAUSE THE EXTINCTION OF HIROLA



We recently concluded a four-year study to understand factors underlying hirola declines. Our findings suggest that hirola demography is driven by a combination of predation and deteriorating rangeland quality, with populations in the contemporary geographic range impacted strongly by declining rangeland quality.

A recent analysis of historical satellite imagery across the hirola's native range revealed that there was a nearly 300% increase in tree cover in the last 27 years (Fig. below). This might have been caused by elephant extirpation in the range which naturally would control tree encroachment.



The increase in tree cover can pose one of the greatest threats to survival of hirola through food limitation and predation risk. Hirola avoid tree cover areas although tree cover area is not more risky for hirola compared to open areas (Ali et al. under review (a)).

A nearly 300% increase in tree cover in the last 27 years in hirola's native range

This means hirola avoid tree encroachment because of lack of grass and may make the recovery of hirola insurmountable. Moreover, increased tree cover negatively impacts local



Hirola in its natural range. The picture depicts increase in tree cover within the hirola range.

livelihoods which depend wholly on livestock. This situation calls for urgent actions to restore and conserve the hirola habitat.

Habitat restoration for endangered species like hirola can however, be costly in terms of money, time and expertise and would require careful evidence based conservation approach. Our project therefore aims to restore range for hirola in areas where hirola persists currently as well as future reintroduction sites by a combination of research based restoration actions. These restoration actions will not only help to improve habitats but will also have the knock-on benefit of improving local livelihoods.

In order to evaluate local people's acceptance levels of potential restoration actions, we conducted a survey in which we administered

questionnaires to the locals with several candidate restoration actions to choose from (Ali et al. in review (b)).

Findings from the survey showed that the strongest local support was for bush clearing, grass reseeding, fertilization and community-based elephant conservation. In light of these, our programs and through the support of our partners aim at implementing these management interventions in the range. Increasing habitat ranks is one of the highest conservation priorities for hirola (IUCN, 2008) and has the potential to substantially and positively impact on the long-term recovery of hirola.

Hirola geographic range contracted largely due to increase in tree cover and habitat availability for hirola has declined by 75% between 1985 and 2012.



USING SCIENCE TO GUIDE CONSERVATION



The Hirola conservation programme is spearheading the monitoring of remaining hirola herds within the entire geographical range of hirola. In addition, we are prioritizing the protection of prime hirola habitats (i.e Arawale National Reserve) and the establishment of new conservancies for hirola. Inadequate protection of hirola habitat has been identified as one of the primary reasons driving their declines.

Inadequate protection of hirola habitat has been identified as one of the primary reasons driving their declines.



In 2016, the hirola conservation programme initiated a habitat restoration project to enhance the recovery of the hirola antelope.

To the extent possible, we are most interested in curtailing the continued decline of hirola in ways that are compatible with livestock production. This is because locals depend solely on livestock production for their livelihoods. As such, this effort is employing manual removal to thin trees and seeding and fertilization to accelerate growth and quality of understory food plants.

To start with, we are using four (4), one-ha experimental plots to study conditions necessary for range restoration from which we are demonstrating to Somali pastoralists first-hand success or failures of these efforts. Following these results, we will implement area wide restoration effort through a partnership with Somali pastoralists.

A successful result will constitute:

- 1) The physical cutting, uprooting or breaking of branches in attempt to restore grassland at scales of hundreds of hectares in prioritized areas within the hirola range
- 2) The planting of native grass seeds alongside fertilizer (manure) at scales of hundreds of hectares.
- 3) Community-based protection of elephants (in the form of anti-poaching squads and enhanced communication between villages) to encourage elephant herds to reside on community lands.





Giraffes in Arawale National Reserve. HCP initiated discussions in 2012, on the restoration and re-establishment of the reserve with the local stakeholders and the Garissa County Government.

Our anti-poaching programme focuses on the conservation of elephants and hirola. Historically, about 5000 elephants and over 100 black rhinos maintained open grasslands for hirola in south eastern Kenya, between the Tana River and the Boni Forest regions. These "mega herbivores" were poached out in the late 1970s and early 1980s with a catastrophic transformation of grasslands to forests leading to massive declines in hirola population.

However, elephants have naturally recolonized this area in 2011 and now eastern Kenya represents one of the very few areas in which elephants currently are expanding to fill their

historic range. We suspect that this is due to heightened poaching elsewhere in Kenya (Mose & Western 2015).

To address the poaching problem, we have employed a team of 8 scouts who are dedicated to the protection of elephants and hirola.

Further, our scouts are working with other agencies to ensure that all security/poaching incidents in the entire range are monitored collectively between the government and the local groups. These joint effort, creates a collaborative approach to security incidents concerning human-livestock-wildlife interactions.

HERDERS FOR HIROLA



We initiated herders for hirola project with an initial membership of up to 60 pastoralists who voluntarily report hirola sightings, mortalities and poaching through a widely publicised hotline number operated from our field office in Masalani, Ijara sub-county of Garissa. This effort was aimed to augment our anti-poaching programme by making use of pastoralists (comprising of ordinary herders), who volunteer to contribute their time while herding their livestock.

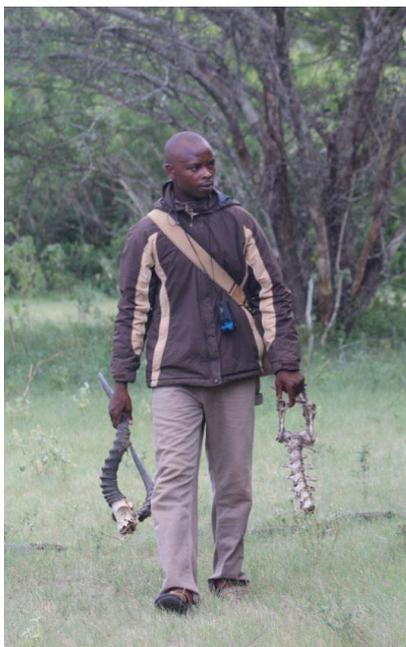
**In 2015 we recruited up to 30
new members from 10 villages
across hirola range**



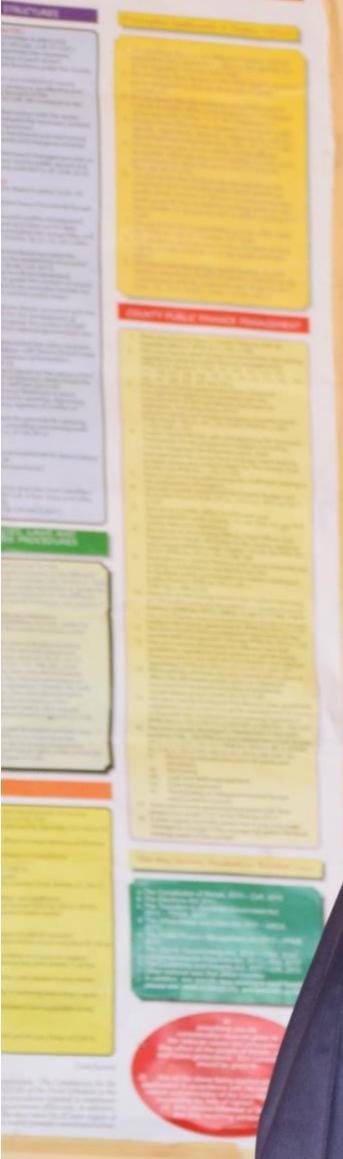
In turn, these herders benefit from our trainings and use our cell phones, potentially improving living standards while increasing appreciation for hirola conservation. Nearly all of Somali herders do not attend school and spend majority of their time outside the villages, thus serving as the “eyes and ears” within the hirola range. Through herders for hirola project, HCP hopes to use this platform to expand the scope of our effort, granting herders and their families an opportunity to participate in hirola conservation.

The herders are comprised of a wide range of age groups including the Dalinyaro (youths), who serve as wildlife ambassadors, informants and first responders to stress call such as poaching. The Duqey (elders), with their leverage to influence the communities to support conservation and the Hawenka (women) who are the main backbone of all these groups.

In 2015 we recruited up to 30 members from 10 villages across hirola range (e.g., Galmagala, Sangailu, Ijara and Bura, Masalani etc). These peripheral areas still hold few hirola herds and are also potential future reintroduction sites for sanctuary bred hirola. It is not an exaggeration to state that long-term support for hirola conservation hinges on the support of these local groups and to improve our relations with them, we are promoting this locally driven conservation programme (first of its kind in the region), to make a lasting contribution to the future of hirola antelope and that of local communities.



tion by County Governments



**“Through the herders for
hirola programme my clan
has been able to attend
seminars and community
meetings that have
enabled us appreciate and
get involved in wildlife
conservation”**

Community Elder.

2015 HIGHLIGHTS



Community Education

In 2015, we focused on awareness creation, with our team visiting five schools in Ijara and Fafi subcounties to highlight the plight of hirola to school going children. Additionally, our educational outreach programme has shown conservation films to audience's in both primary and secondary schools in these two sub-counties.



Research

We concluded four year of ground breaking research to disentangle factors responsible for

hirola declines. Because of historic political instability in the hirola's native range, it has been difficult to pinpoint the reasons underlying hirola declines. Our findings suggest that habitat loss is the biggest driver of hirola declines. Some factors—including elephant poaching, fire suppression, and overgrazing—are likely to have triggered this tree encroachment and may impede contemporary recovery efforts. of restoring hirola historical range. chances of recovery for this globally endangered species.



Habitat Restoration

Following the documentation of hirola's range collapse due to tree encroachment,

we initiated a long-term habitat restoration project with dual intent of both improving local livelihoods and enhancing the recovery of the hirola antelope



Anti-Poaching

We recruited 12 local scouts,

trained them on basic security drills, discipline, first aid, field survival techniques and radio communications. We also organised 3 de-snaring events in Kotile, Bura and Ishaqbini areas.



World Hirola Day

We established and celebrated the world's first hirola day on 12th August 2015.

This date coincides with the world's elephant's day in an effort to connect the two species. We will support locals to mark this date annually.

OVERALL PROGRAMME APPRAISAL



Our work still continues to be the major backbone of hirola conservation and research in the whole of Kenya. Most of our work has been featured in numerous international outlets including The Belfast, Telegraph, The Christian Science Monitor, The Express, The Metro, The Sun, and The Wildlife Extra. Our work has also generated similar enthusiasm locally with coverage from the dailies in Kenya including The Nation and The Standard Newspapers (see our website for these articles).

Despite our success so far, insecurity within the North Eastern region of Kenya continues to be our biggest challenge. While this has the potential to interrupt our work, we are closely working with the security officials in the region as a contingency measure.

LONGTERM CONSERVATION EFFORT FOR HIROLA



While past hirola conservation efforts have failed due to limited local involvement and financial constraints, we are determined to change these historical failures into a successful conservation model. We concede that this situation was exacerbated by lack of biological knowledge about the species and the political turmoil along the Kenya-Somalia border. Our programme is unique in the sense that it is promoting evidence based conservation combining both science and grassroots approach to save hirola.

Over the years the hirola range has endured poor land use practices and the intensification of human activities resulting in severe range degradation. Our Program is demystifying these issues through a spirited educational campaign. If not addressed, human activities have a ripple effect to the future of wildlife, locals and their livestock, characteristically through the tragedy of the commons.



In an effort to avert further situational complexity, our project aims to advance management and livelihood practices that foster ecological, cultural and economic sustainability. Thus, with the continued support from partners, it is possible (and indeed likely) that we will make real headway toward the conservation of this unique animal.



With the continued support from partners, it is possible (and indeed likely) that we will make real headway toward the conservation of this unique animal.



Hirola Conservation Programme
www.hirolaconservation.org
hcp@hirolaconservation.org



Hirola Conservation Program



hirola_program

