Conservation Roadmap and Action Plan for Ethiopia's Antelopes 2026-2035

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GUARDIANS OF THE WILD AND NATIVE

Antelope Specialist Group | Part of IUCN SSC Species Survival Commission

Conservation Roadmap and Action Plan for Ethiopia's Antelopes 2026-2035

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Contents

Acknowledgements ***4***
Foreword ***5***
1. Introduction ***8***
1.1. The planning workshop 8
1.2. Workshop process 8
2. Antelopes in Ethiopia ***8***
3. Main threats ***10***
3.1. Habitat loss and degradation 10
3.2. Competition with livestock 10
3.3. Drought and climate change 10
3.4. Invasive Alien Species (IAS) 11
3.5. Poaching 12
3.6. Disease 12
3.7. Road kills 12
3.8. Fragmentation 12
3.9. Drivers 12
3.10 Constraints 12
4. Conservation measures in place ***13***
4.1. Legal 13
4.2. Protected and Conserved Areas 13
4.3. Research and Monitoring 14
5. Prioritization ***15***
6. Conservation Roadmap ***17***
Vision 17
Goals 17
Strategic Objectives 17
7. Species Action Plans ***20***
Mountain Nyala *Tragelaphus buxtoni* 20
Swayne's Hartebeest *Alcelaphus buselaphus swaynei* 22
Dibatag *Ammodorcas clarkei* 24
Nile Lechwe *Kobus megaceros* 26
Beisa oryx *Oryx beisa* 28
Soemmerring's gazelle *Nanger soemmerringii* 30
Species whose status requires confirmation 32
Appendix 1. List of participants ***34***
Appendix 2. Workshop agenda ***36***
Appendix 3. Welcoming Speech by the Director General of EWCA ***38***
Appendix 4. Species summaries (excluding species covered in section 7) ***39***
References ***45***

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Heuglin's gazelle, Kafta Humera National Park © ASG

Foreword

Ethiopia is endowed with extraordinary natural resource and ecological diversity, ranging from highland forests and alpine ecosystems to arid lowlands, savannas, riverine systems, mountains, and valleys. These diverse landscapes support a remarkable variety of wildlife and provide important ecological, cultural, and economic values. Among Ethiopia's wildlife heritage, antelopes hold an important place.

Ethiopia is home to several globally significant antelope species, including the Mountain Nyala, Swayne's Hartebeest and Menelik's Bushbuck. Beyond their value as unique components of our biodiversity, antelope species play important ecological roles in maintaining healthy and resilient ecosystems and contribute to local livelihoods through nature-based tourism and ecosystem services. Their conservation is therefore closely linked to the broader goals of environmental sustainability and national development.

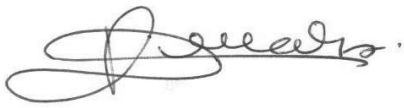
Despite their importance, many Ethiopian antelope species are facing increasing threats. Habitat loss and fragmentation resulting from agricultural expansion and unsustainable land-use practices, poaching, human-wildlife conflict and climate change are causing significant pressure on their populations and habitats. The conservation status of several species, including those classified as Endangered or Vulnerable on the IUCN Red List, highlights the urgency of strengthening conservation efforts.

This National Antelope Conservation Roadmap and Action Plan Development Workshop was convened to reverse the declining status and contribute towards safeguarding the species survival and its habitat. The development of this Roadmap and Action Plan is not merely a technical undertaking, rather it is a national conservation priority, that requires coordinated commitment and action from all stakeholders.

The workshop has provided an important opportunity to bring together government institutions, researchers, academia, conservation organizations, development partners, and local communities to share knowledge, identify key challenges, and agree on practical and science-based conservation priorities.

Therefore, this Roadmap and Action Plan provides a strategic framework for safeguarding Ethiopia's antelope species and their habitats through promoting sustainable livelihoods options, reduction of poaching and illegal wildlife trade and strengthening coexistence between people and wildlife. The effectiveness of the Action Plan will depend on our collective ownership, collaboration, commitment, and ability to translate agreed priorities into concrete actions.

Conserving Ethiopia's antelopes means conserving our ecosystems, strengthening ecological resilience, supporting communities, and preserving an important part of our natural heritage for today and future generations. I am confident that, through our collective efforts, we can address the current challenges, reverse population declines, and secure a sustainable future for Ethiopia's unique antelope species. This National Action Plan represents an affirmation of the determination of the Ethiopian people that these iconic species will not vanish from our land.



Kumara Wakjira
Director General
Ethiopian Wildlife Conservation Authority

Participants at the National Antelope Conservation Roadmap and Action Plan Development Workshop, Addis Ababa, 23-25 September 2025 © Ethiopian Wildlife Conservation Authority

Executive summary

Ethiopia contains a high diversity of ecosystems and harbours 35 species and subspecies of antelopes, including several global and regional endemics, making it one of the most important countries in Africa for antelope conservation. A stakeholder planning workshop was held in Addis Ababa on 23-25 September 2025 to review and update the status of antelopes in Ethiopia, assess the main threats, develop a national road map for antelopes, and draft action plans for the highest priority species. The workshop was organised by the Ethiopian Wildlife Conservation Authority (EWCA) and the IUCN SSC Antelope Specialist Group, with funding from the St Louis Zoo Wildcare Institute. Over 60 participants attended, representing EWCA, regional bureaus, universities, national experts, international donors and NGOs, tourism and hunting sectors, and IUCN Species Survival Commission. The workshop consisted of presentations on the status of key antelope species, working group discussions, a prioritization exercise, and plenary sessions. The most serious threats to antelopes overall were identified as habitat loss and degradation, competition with livestock, drought and climate change, invasive alien species, and poaching. Action plans were drafted for six of the highest priority antelopes: mountain nyala (*Tragelaphus buxtoni*), Swayne's hartebeest (*Alcelaphus buselaphus swaynei*), dibatag (*Ammodorcas clarkei*), Nile lechwe (*Kobus megaceros*), beisa oryx (*Oryx beisa*), and Soemmerring's gazelle (*Nanger soemmerringii*). Action Plans will be developed later for a second set of species.

1. Introduction

1.1. The planning workshop

A stakeholder planning workshop to develop a conservation framework for Ethiopia's antelopes was held in Addis Ababa on 23-25 September 2025. The workshop was co-organised by the Ethiopian Wildlife Conservation Authority (EWCA) and the IUCN SSC Antelope Specialist Group (ASG) with funding from the St Louis Zoo Wildcare Institute, USA. The workshop took place at the Ghion Hotel and was attended by over 60 participants, representing EWCA, national park managers, regional bureau representatives, Addis Ababa and Hawassa universities, private companies (Tour and Travel), Ethiopian Heritage Trust, the Ethiopian Wildlife Conservation Think-tank, Cheetah Conservation Fund, international donors (the German agency for international cooperation, GIZ, and the German state development bank, KfW), the tourism and hunting sectors, International Fund for Animal Welfare (IFAW), and ASG. The aims of the workshop were to update the status of antelopes in Ethiopia; detail the overall threats to antelopes; identify the species in most urgent need of conservation attention; develop a roadmap for all species; and draft action plans for the highest priority species.

1.2. Workshop process

The workshop was formally opened and closed by Mr Kumara Wakjira, Director General of EWCA. The components of the workshop were: (i) presentations on the conservation status of key antelope species; (ii) an update of all species' status and general discussion; (iii) identification of the direct and indirect threats to antelopes, the underlying drivers, and constraints limiting action, along with their geographic extent and severity; (iv) development of a roadmap including a long-term vision, goal, and strategic objectives; (v) a prioritisation exercise to determine the rank of each antelope in terms of global threat category, endemism, national population share and other factors; (vi) drafting action plans for the highest priority species. Activities were conducted in a combination of working groups and plenary sessions. Appendix 1 contains a list of participants and Appendix 2 the workshop agenda.

2. Antelopes in Ethiopia

Thirty-five species and subspecies of antelopes have been reported to occur in Ethiopia, among the five highest country totals in Africa. Three are endemic to Ethiopia and eight more are endemic to the Horn of Africa. Seven antelopes have over 40% of their range in Ethiopia and another five over 20%. Antelopes in Ethiopia occupy a wide range of ecosystems, including Afromontane highlands, the Danakil desert, Somali semi-arid shrubland, Sudanian savanna, and the Gambella wetlands, part of the Sudd ecosystem. Ethiopia is thus one the most antelope-diverse countries in Africa and of high importance for antelope conservation regionally and globally. Table 1 lists the species and subspecies, their current status on the IUCN Red List, and the estimated proportion of the range in Ethiopia. The current presence of three antelopes requires confirmation. Only one, Menelik's bushbuck, has not yet been assessed for the Red List. A summary of the current status of each antelope is provided in Appendix 4.

Table 1. Antelopes occurring in Ethiopia

Taxon	IUCN Red List[1]	% global range in Ethiopia	Horn of Africa endemic
Mountain Nyala *Tragelaphus buxtoni*	EN	100	Yes
Bushbuck *Tragelaphus scriptus*	LC	<10	-
Menelik's bushbuck *Tragelaphus scriptus meneliki*	NE	100	Yes
Greater Kudu *Tragelaphus strepsiceros*	LC	10-15	-
Lesser Kudu *Tragelaphus imberbis*	NT	20-25	-
Common Eland *Tragelaphus oryx*	LC	>5	-
Common Waterbuck *Kobus ellipsiprymnus ellipsiprymnus*	LC	>5	-
Defassa Waterbuck *Kobus ellipsiprymnus defassa*	NT	10	
White-eared Kob *Kobus kob leucotis*	LC	20[2]	
Nile Lechwe *Kobus megaceros*	EN	10[2]	-
Bohor Reedbuck *Redunca redunca*	LC	10	-
Mountain Reedbuck *Redunca fulvorufula chanleri*	VU	25-30	-
Roan Antelope *Hippotragus equinus*	LC	<10	-
Beisa Oryx *Oryx beisa beisa*	EN	25	-
Swayne's Hartebeest *Alcelaphus buselaphus swaynei*	EN	100	Yes
Tora Hartebeest *Alcelaphus buselaphus tora*	CR [PEx]	50-60	Yes
Lelwel Hartebeest *Alcelaphus buselaphus lelwel*	EN	<10	-
Tiang *Damaliscus lunatus*	LC	10<	-
Gerenuk *Litocranius walleri*	NT	25-30	-
Dibatag *Ammodorcas clarkei*	VU	50-75	Yes
Soemmerring's gazelle *Nanger soemmerringii*	VU	40-50	Yes
Grant's (Bright's) gazelle *Nanger granti notata*	LC	10	-
Speke's Gazelle *Gazella spekei*	EN	?	Yes
Dorcas gazelle *Gazella dorcas*	LC	5	-
Heuglin's gazelle *Eudorcas tilonura*	EN	50	Yes
Mongalla gazelle *Eudorcas albonotata*	LC	>10	-
Klipspringer *Oreotragus oreotragus*	LC	10-15	-
Silver Dikdik *Madoqua piacentinii*	DD	50-75	Yes
Salt's Dikdik *Madoqua saltiana*	LC	40-50	Yes
Guenther's Dikdik *Madoqua guentheri*	LC	40	-
Beira *Dorcatragus megalotis*	VU	5	Yes
Oribi *Ourebia ourebi*	LC	10	-
Bush Duiker *Sylvicapra grimmia*	LC	5-10	-
Harvey's Duiker *Cephalophus harveyi*	LC	?	-
Weyns's Duiker *Cephalophus weynsi*	LC	?	-

[1] CR = Critically Endangered; EN = Endangered; VU = Vulnerable; NT = Near Threatened; LC = Near Threatened; LC = Least Concern; DD = Data Deficient; NE = Not Evaluated; PEx = Possibly Extinct
[2] Seasonal occurrence

3. Main threats

3.1. Habitat loss and degradation

This is the most widespread threat, and it has multiple causes: agricultural expansion by smallholders and commercial plantations; clearance of trees and scrub for building, fuel, charcoal production and incense; overgrazing; expansion of settlements; tourist development; industry; mining and quarrying natural resources; and for land for building, roads and other infrastructure.

Bulto *et al*. (2026) quantified historical land-use / land-cover (LULC) changes from 1987 to 2023 and projected future trends from 2023 to 2059 in Borana National Park (N.P). The results showed that between 1987 and 2023, grassland, shrubby grassland, woodland, and forest declined by 24.5%, 51.9%, 63.9%, and 75.5%, respectively. Conversely, shrubland expanded more than five-fold, from 7.5% to 50.7%, while agricultural land increased over 6-fold. These trends are forecast to continue through to 2059, with shrubland projected to expand by an additional 41.9% and agricultural land by 55.8%, at the expense of woodland (−69.4%), shrubby grassland (−54.5%), and grassland (-29.9%).

Analysis of LULC changes in Kembata Tembaro district, south-central Ethiopia, showed declines in forest cover from 43.1% in 1973 to 13.1% in 2000, and in grasslands from 45.5% in 1973 to 6.3% in 2018 (Mariye *et al*. 2022). In the Awash River Basin, there was a notable and steady growth in the coverage of urban areas between 1990 and 2020. Urban areas made up 22% of the land use class in 1990, rising to 49% by 2020. From 1990 to 2020, agricultural land declined by 1.3% and bare land by 50% (Tilahun et al. 2025).

In the Ethiopian Highlands, land degradation has occurred as a result of LULC caused by inefficient methods, high livestock numbers, and human pressure. All LULC variables, such as the spread of various agricultural activities, the production of fuelwood and charcoal, cutting trees for construction resources, settlements, and revenue growth, were associated with population increase and resettlement (Hussein 2023).

3.2. Competition with livestock

Domestic livestock compete with antelopes for grazing or browse, displace them to suboptimal habitats, and increase disturbance. Overgrazing reduces rangeland quality and facilitates encroachment of non-palatable species or bushes. Between 2004-2005 and 2018-2019, the number of cattle in Ethiopia increased by 58.7% (from 38,749,310 head to 61,510,258); sheep by 82.7% (18,074,721 to 33,020,392), goats by 162.2% (14,858,646 to 38,963,879) and camels by 284% (458,576 to 1,760,870) (Begna et al. 2024).

3.3. Drought and climate change

Climate change affects Ethiopian antelopes mainly through droughts, habitat changes, bush-encroachment, reduced food availability, water scarcity, and increased conflict with humans and livestock. Climate change disrupts traditional rainfall patterns, making migration routes less reliable. Warmer conditions can also expand the range of ticks, parasites, and livestock

diseases, significantly affecting malnourished animals that are less resistant to infections during drought periods.

Long-term climate trends and extreme precipitation indices across Ethiopia were assessed using the Coupled Model Intercomparison Project Phase 6 (CMIP6) datasets under two emission scenarios: medium (SSP2-4.5) and high (SSP5-8.5) (Mengistu et al. 2025). The projected trends show substantial warming and increased precipitation under both medium and high scenarios. Compared to the 1991–2010 baseline, mean annual precipitation is projected to increase by about 18% (medium scenario) and 41% (high scenario) by the late 21st century, with the greatest intensification during the main rainy season in June–September. However, dry-season rainfall is predicted to remain low, maintaining strong seasonality and raising the risk of both floods and droughts. Increases in precipitation are spatially concentrated in the wetter southwestern highlands, while arid lowlands will see limited increases. Mean maximum and minimum temperatures are projected to rise by up to 3.6 and 4.6°C under the medium and high scenarios, respectively, with high-temperature zones expanding into formerly cooler regions. However, projections also suggest a notable decrease in drought occurrences, especially under the high scenario. Mengistu et al. (2025) identified five Homogenous Climatic Regions to enable more precise and localised data to be used to develop regional climate adaptation and mitigation strategies.

3.4. Invasive Alien Species (IAS)

IAS are one of the fastest-growing threats to biodiversity globally, outcompeting indigenous species, transforming habitats, and degrading habitats, with serious consequences for biodiversity, agriculture, and local livelihoods. The main effects on antelopes are degradation of grasslands through the spread of non-palatable invasive plants or encroachment of scrub that restrict mobility and reduce feeding habitat.

One of the most damaging invasive species is *Prosopis juliflora,* a shrub or small tree native to Central and South America. It is drought-resistant, grows quickly, and it was planted in many places in the Horn of Africa, East Africa and the Middle East to combat desertification and provide fodder for livestock. In Ethiopia, it has spread aggressively in the lowlands, adversely impacting grassland, rangeland, woodland, and natural forests, and in some places it forms a monoculture transforming grasslands into dense scrub (see review by Gebrehewot and Steger 2024). *Prosopis* spreads easily and is difficult to eradicate. In the Afar Regional State *P. juliflora* is estimated to be expanding at a rate of 31,127 ha/year (Shiferaw et al. 2019). Encroachment by this plant also poses a threat to the livelihoods of pastoralists, impacting millions of people. Shiferaw et al. (2019) reported an average loss of ecosystem service values of $USD 602 million between 1986 and 2017.

Parthenium hysterophorus is a herbaceous plant, also native to the Americas, that has become one of the most globally harmful invasive weeds. It reproduces quickly and is adapted to nutrient-poor habitats. In Ethiopia, it has spread across rangelands, suppressing native forage plants through chemical competition (allelopathy), and reducing grazing quality for both antelopes and livestock. *Lantana camara* was originally introduced as an ornamental plant but has invaded grasslands and other open habitats where it forms impenetrable thickets. Water hyacinth *Eichhornia crassipes* can be a serious problem in wetland ecosystems,

replacing natural vegetation and blocking water flows. Certain native species such as *Calotropis procera* can also expand aggressively due to severe overgrazing by livestock.

3.5. Poaching

Illegal hunting, mainly for meat, but sometimes also for horns, skins, or medicinal products, has played a significant role in the decline of many antelopes. Poaching may increase during periods of instability when law enforcement is interrupted, and firearms are more easily available.

3.6. Disease

Many diseases affecting domestic livestock can be transmitted to antelopes. Among the most dangerous are anthrax, rinderpest, foot and mouth disease, and *peste de petits ruminants* (PPR; or goat plague). Expansion of livestock grazing further increases the risks of disease transmission.

3.7. Road kills

The risk to antelopes increases on high-speed and high-volume routes such as the Addis Ababa-Djibouti highway and places where roads cross antelope movement corridors.

3.8. Fragmentation

As antelope populations and patches of natural habitats become progressively smaller, they are increasingly isolated, hindering dispersal and gene flow, with implications for genetic diversity, reproductive fitness, and the risk of inbreeding. Small populations are also inherently more vulnerable to stochastic events (e.g. floods, fire, disease outbreaks).

3.9. Drivers

The drivers underlying the threats include:

- Continuing increase in the human population and associated demand for living space. The human population of Ethiopia is predicted to increase from the current 102 million to almost 190 million by 2050, leading to higher demand for livestock products (FAO 2019) and other natural resources
- Poverty, driving use or overuse of natural resources
- Lack of a coordinated land use plan to regulate agricultural and infrastructure developments
- Low priority given to biodiversity conservation
- Intermittent instability and insecurity

3.10 Constraints

- Lack of funding and other resources
- Inadequate training and capacity
- Lack of information on status and biology

- Lack of awareness of antelope conservation among decision makers
- Ineffective law enforcement
- Lack of standardized census and monitoring methods. Methods used to date include aerial surveys, vehicle transects, direct observation or indirect indices, foot transects, point counts or total counts. Scientific rigour varies and some population estimates are reported without confidence intervals or inclusion of detection probability.

4. Conservation measures in place

4.1. Legal Framework

Ethiopia has wildlife laws such as proclamations, regulations and guidelines that widely address the conservation of the species and their natural habitats.

Wildlife Development, Conservation and Utilization Proclamation No.541/2007 is the principal federal wildlife conservation law covering wild animals in general and protected areas designated as National Parks, Wildlife Sanctuaries, Reserves, and Controlled Hunting Areas and including all wildlife species and their natural habitats.

The second very important legal instrument is the Council of Ministers Wildlife Regulation No. 163/2008. This prohibits or regulates sustainable extraction of wildlife species through controlled hunting and capture of wildlife. In particular, hunting or capturing wildlife species requires a license, and some species listed under a special protection article in the regulations may not be hunted or captured at all, except when a special permit is provided by the responsible authority, for scientific purposes. In addition to these proclamations and regulations, the protected area rules, wildlife directives and guidelines provide substantial protection to antelope species. In general wildlife laws in Ethiopia protects all antelopes from all illegal activities.

4.2. Protected and Conserved Areas

The Government of Ethiopia has designated over 90 protected areas under different IUCN categories, including 31 national parks, 4 sanctuaries, 3 wildlife reserves, 5 biosphere reserves, 44 controlled hunting areas, and 8 community conserved areas (Figure 1). These cover approximately 14% of the country and conserve diverse ecosystems, including alpine, savanna, and forest biomes. These areas are managed by EWCA or regional bodies. The 44 Controlled Hunting Areas (CHA) have been designated for sustainable resource use through sport hunting, based on regulated annual offtake. For a review of the Protected Area system in Ethiopia see Scholte et al. (2025).

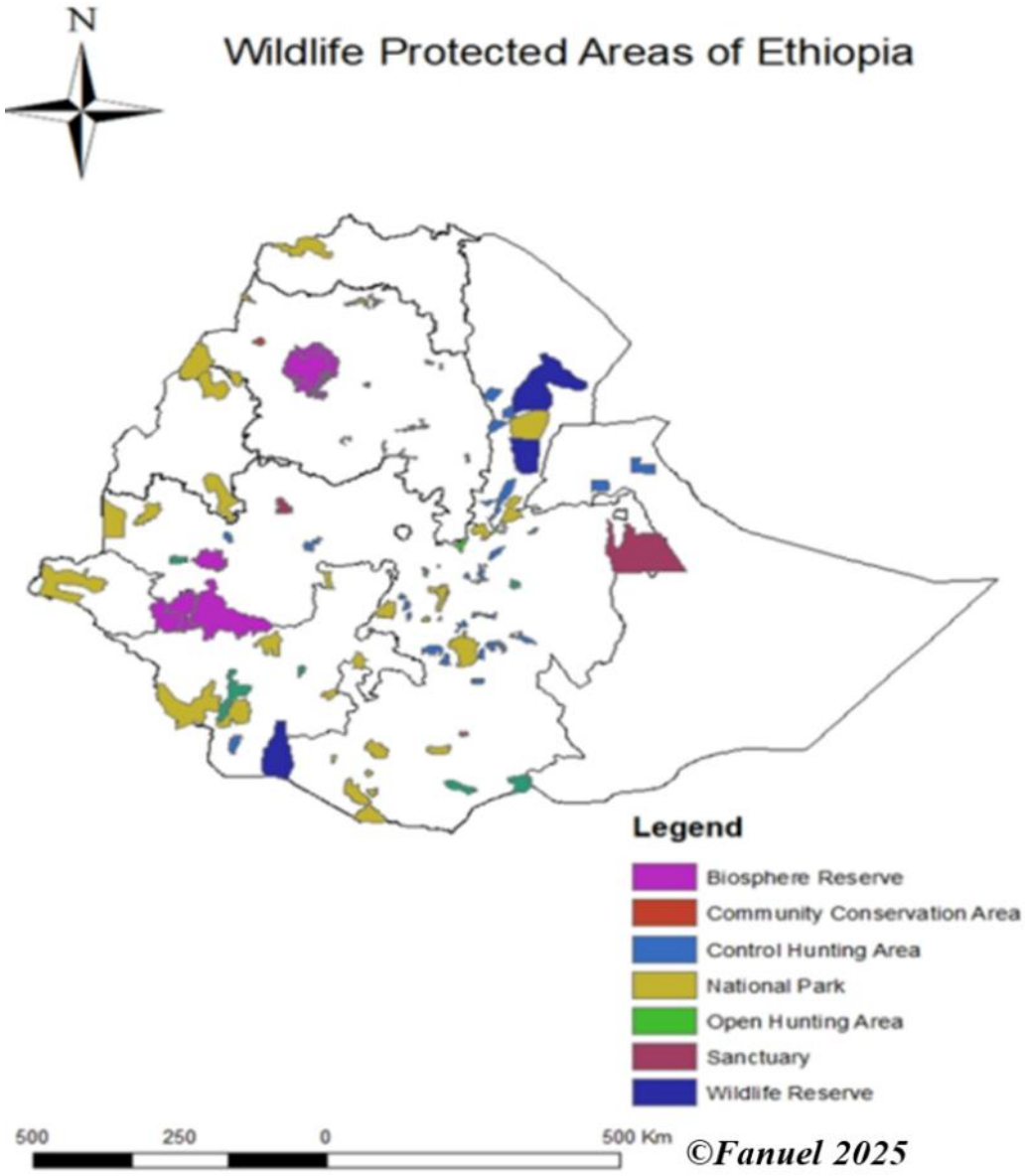


Figure 1. *Protected areas of Ethiopia, adapted from Summary of Wildlife Protected Areas (EWCA-IUCN-WDPA) July 2025: Fanuel Kebede 2025.*

4.3. Research and Monitoring

Many research and monitoring projects on antelopes, their habitats, and key sites have been conducted by universities, EWCA, and NGOs. Nevertheless, many data gaps remain, even details of distribution and robust population estimates. A recurring issue is that wildlife censuses contain certain inconsistencies arising from logistical challenges, the application of varying methodologies, limited human resource capacity, and these ultimately impact the accuracy of the data.

5. Prioritization

When considering a large number of antelope species, and where human and financial resources are both limited, it becomes necessary to select priorities for action. This process does not indicate that some species are unimportant, but that those most in need of conservation are identified, and their needs addressed first. Prioritization exercises can be complex, so with the limited time available at the workshop, a basic process was used, acknowledging that this represented a first attempt and will be refined later.

Four working groups evaluated the importance of each antelope according to four criteria: global threat status (IUCN Red List), the proportion of the global range lying within Ethiopia (where 100% means it is endemic to the country), regional status and trends (in the Horn of Africa), and national status (including rate of decline, threats, etc). Possible scores in each category were: Very high (4), High (3), Medium (2) and Low (1), giving a maximum possible score of 16.

Based on the above criteria, three antelopes gained the maximum score of 16/16, four obtained 15/16, and two 14/16. The full results of the prioritization exercise are shown in Table 2. The scores were generally aligned among working groups, except for the common eland, which was ranked high by two groups and low by two other groups. Following a discussion, it was agreed that the endemic Menelik's bushbuck should also be ranked as a high priority. Additional prioritization criteria suggested were: the extent of national decline, severity of threats, and status as an iconic, flagship or umbrella species. For many species, some of these points were captured or partially captured in the original scoring.

Working in small groups, action plans were drafted for six of the highest scoring antelopes: mountain nyala, Swayne's hartebeest, dibatag, Nile lechwe, beisa oryx, Soemmerring's gazelle (see section 7).

The actions recommended in three of these action plans will also benefit another important species that occupies the same range: Dibatag + silver dikdik; Mountain nyala + Menelik's bushbuck, Nile lechwe + white-eared kob.

Action Plans will be developed later for a second set of species: Heuglin's gazelle, gerenuk, lesser kudu, common eland, and dorcas gazelle.

Five species are (i) unconfirmed by hard evidence; (ii) known only from a single specimen; (iii) possibly extinct, or (iv) very recently rediscovered. For these five species the primary action needed is to confirm their present status in Ethiopia (see section 7).

Table 2. Results of the prioritization exercise

Species/subspecies	Group1	Group 2	Group 3	Group 4	Total
Mountain Nyala	4	4	4	4	16
Swayne's Hartebeest	4	4	4	4	16
Dibatag	4	4	4	4	16
Nile Lechwe	4	4	4	3	15
Beisa Oryx	3	4	4	4	15
Tora Hartebeest	3	4	4	4	15
Heuglin's Gazelle	3	4	4	4	15
Soemmerring's Gazelle	3	4	3	4	14
Silver Dikdik	3	4	3	4	14
Beira	4	4	2	3	13
Common Eland	4	4	2	2	12
Speke's Gazelle	3	3	3	3	12
Lelwel Hartebeest	3	3	2	3	11
Lesser Kudu	4	3	2	3	10
Dorcas gazelle	3	4	1	2	10
Mountain Reedbuck	3	1	2	3	9
Roan Antelope	3	3	1	2	9
Waterbuck	2	4	1	1	8
Gerenuk	1	2	2	3	8
Salt's Dikdik	2	2	2	2	8
Oribi	2	2	2	2	8
Greater Kudu	2	1	2	2	7
White-eared Kob	2	3	1	1	7
Tiang	1	3	1	2	7
Grant's (Bright's) Gazelle	2	2	1	2	7
Klipspringer	1	1	1	4	7
Guenther's Dikdik	1	2	2	2	7
Bushbuck	2	1	2	1	6
Bohor Reedbuck	1	1	1	1	4
Mongalla Gazelle	3	?	?	1	4
Bush Duiker	1	1	1	1	4
Harvey's Duiker	1	?	?	2	3
Weyns's Duiker?	1	?	?	2	3
Menelik's bushbuck	3	-	-	-	-

6. Conservation Roadmap

The conservation roadmap addresses the main threats to antelopes across Ethiopia and aims to benefit all species including widespread and common species.

Vision

Viable populations of Ethiopia's antelopes conserved in healthy ecosystems, together with their cultural and economic values, with active participation of local communities, in partnership with all stakeholders harmonised with sustainable and nature-based economic development.

Goals

1. Ensure the long-term survival and ecological viability of Ethiopia's antelopes
2. Protect, restore and manage sustainably the habitats of/for Ethiopia's antelopes
3. Implement effective antelope conservation with the active participation of local communities

Strategic Objectives

Nine strategic objectives (SO) and associated actions were identified, addressing the main threats and constraints.

SO1. Habitat loss, degradation, and fragmentation are reduced

1.1. Minimise the effects of infrastructure, settlement expansion, commercial and agricultural development

1.1.1. Identify and map high-priority antelope sites and corridors
1.1.2. Maintain the integrity of National Park boundaries / core zones
1.1.3. Implement integrated land-use planning and zoning
1.1.4. Conduct Environmental and Social Impact Assessments (ESIA) transparently and according to international standards
1.1.5. Restore key areas of habitat

1.2. Reduce the impact of overgrazing

1.2.1. Promote sustainable pastoralism initiatives
1.2.2. Develop community co-management grazing agreements in key sites
1.2.3. Promote improved breeds and lower livestock densities
1.2.4. Provide alternative livelihood options

1.3. Control, manage, or eradicate Invasive Alien Species (IAS)

1.3.1. Assess key antelope species and sites affected by IAS
1.3.2. Develop a prevention-management-eradication strategy at affected sites
1.3.3. Implement biosecurity measures to prevent further spread of IAS

1.4. Mitigate the impact of fire

1.4.1. Develop a fire response and management strategy for each key site / protected area

1.4.2. Apply fire breaks where needed
1.4.3. Provide training and equipment
1.4.4. Establish fire brigade at national and local level

1.5. Reduce fragmentation by reconnecting populations
1.5.1. Map important antelope corridors and stepping-stone sites
1.5.2. Develop co-management agreements for these sites
1.5.3. Restore habitats and/or reintroduce populations where appropriate

SO2. Direct mortality is reduced

2.1. Implement effective anti-poaching measures
2.1.1. Ensure adequate capacity is available for patrol and enforcement (staff, vehicles)
2.1.2. Train national park staff in SMART monitoring
2.1.3. Review laws and strengthen where necessary
2.1.4. Increase awareness of laws and regulations
2.1.5. Collaborate with law enforcement agencies
2.1.6. Introduce benefit sharing and/or alternative livelihoods initiatives in and around protected areas

2.2. Mitigate the effects of roadkill
2.2.1. Identify road casualty hotpots
2.2.2. Install speed limits or breakers
2.2.3. Introduce signage at wildlife crossings
2.2.4. Raise awareness for drivers through the media and social media

2.3. Prevent and treat outbreaks of disease and epizootics
2.3.1. Conduct a Disease Risk Analysis for major wildlife diseases
2.3.2. Establish early response and detection protocols for major wildlife diseases
2.3.3. Coordinate activities with national veterinary services
2.3.4. Train staff in wildlife disease detection
2.3.5. Provide well-equipped veterinary labs and trained staff at national level
2.3.6. Align conservation actions with the One Health Programme

SO3. The impacts of climate change are mitigated

3.1. Conduct climate change vulnerability assessments for antelope species
3.2. Develop climate-resilient adaptation and mitigation plans for national parks and critical antelope sites
3.3. Include climate resilience in regional development plans

SO4. Key sites are effectively protected and managed

4.1. Review the Protected and Conserved Area network for coverage of key antelope populations
4.2. Identify important sites and corridors for species
4.3. Establish community-managed areas or grazing agreements
4.4. Include antelope conservation needs in all site management plans

SO5. Legal and policy frameworks encompass antelope conservation needs

5.1. Review the legal framework and revise as appropriate
5.2. Add beira *Dorcatragus megalotis* and silver dikdik *Madoqua piacentinii* to the national list of protected species
5.3. Include antelope conservation needs into the National Biodiversity Strategy and Action Plan revisions

SO6. Local communities are fully engaged in conservation initiatives

6.1. Create livelihood benefits for communities through employment, local procurement, or alternative livelihood creation
6.2. Ensure community participation in decision-making and action
6.3. Establish community-based conservation areas to supplement the PA network
6.4. Incorporate local ecological knowledge (LEK) into conservation programmes

SO7. Adequate capacity to manage antelope populations is available

7.1. Hold relevant training courses for national park staff and local community monitors
7.2. Provide adequate equipment for patrolling, management and monitoring

SO8. Data and training

8.1. Develop a national antelope database
8.2. Consider application of a quarter degree square grid to align with regional initiatives
8.3. Compile GIS-based distribution maps of all species ranges
8.4. Develop standardised survey and monitoring methods for different habitats and species
8.5. Organise training workshops on survey, monitoring, habitat management
8.6. Identify antelope research gaps and steps to address them
8.7. Maintain a library of resources and publications on antelopes
8.8. Investigate the causes of severe species declines
8.9. Establish a national habitat monitoring scheme

SO9. Awareness raising

9.1. Raise awareness of the importance of antelope conservation among local communities
9.2. Raise awareness of the importance of antelope conservation among decision-makers

7. Species Action Plans

The recommended objectives and actions listed below are species-specific and are complementary to those in the national Roadmap (Section 6). The actions will be further developed into 'SMART' workplans.

Mountain Nyala *Tragelaphus buxtoni*

Distribution and status

Endemic, and a flagship species for the Ethiopian highlands. Currently, mountain nyala has a fragmented distribution in the Bale, Arsi, and Ahmar Mountains. There are 10 subpopulations in Bale, including Bale Mountains N.P. (BMNP) and Harenna Forest, and seven in the Ahmar and Arsi mountains, north to Kuni-Muktar and west to Munessa (Atickem et al. 2011, Worku et al. 2024). Most of the remaining populations are located in Bale Mountains N.P., Arsi Mountains N.P. (AMNP) (managed by Oromia Forest & Wildlife Enterprise), and in several Controlled Hunting Areas (CHA). In the Bale region, 32% of mountain nyala are found in protected areas and 54% in CHAs.

The latest population estimate in BMNP is 1500-2000, based on 25 line transects, and the trend appears to have remained relatively stable during 2008-2024. The estimate in Arsi-Ahmar, based on a pellet count methodology, is 706 (Aleayehu 2016). The largest CHA populations are in Odobullu (1025), Ababesah-Demaru (986), and Hanto (532; +/- 49.3) in 2015-2016 (Worku and Datiko 2017). These figures total 4750-5250, plus an unknown number in other CHAs. However, note that these estimates were made at different times using different methods, so they are not directly comparable. A survey of mountain nyala numbers across all known sites and using a standardized method is an important task.

As an inhabitant of higher elevation vegetation zones, mountain nyala's range has always been patchy, but fragmentation has been accelerated by habitat destruction and construction of roads and settlements. Even in BMNP there are no corridors between mountain nyala populations in Park HQ, Gesse (Gaysay) Grasslands and the *Hagenia-Juniperus* woodlands.

Threats

Direct mortality: BMNP staff report that some illegal hunting may still take place, while feral and domestic dogs cause 88% of juvenile mortality.
Habitat loss and degradation: A significant portion of mountain nyala's forest habitat has been destroyed or degraded by cutting, transformation to agriculture, heavy grazing by domestic livestock, and expansion of settlements. Encroachment, overgrazing, and tree cutting in Harenna forest also affect the BMNP and proposed recent tourism developments may pose a further threat if sited close to key habits in the park. A study carried out in Arsi Mountains N.P. clearly indicated that livestock outcompeted mountain nyala and other wild ungulates and that tree cutting reduced habitat quality affecting populations of wildlife (Girma et al. 2018).

Mountain nyala: Recommended Objectives and Actions

Objective 1: Current populations are protected and expanded
1.1. Enforce legal protection in BMNP and AMNP
1.2. Provide the necessary resources to support regular patrols
1.3. Map road mortality hotspots and install speed limits and signage
1.4. Ensure that hunting quotas are based on sound scientific evidence and monitored
1.5. Highlight the importance and endemic status of mountain nyala to regional and national decision makers
Objective 2: Key habitats are protected and managed effectively
2.1. Update site management plans
2.2. Protect key areas from development and encroachment e.g. Gesse (Gaysay) grasslands, Senetti Plateau
2.3. Remove domestic livestock from core zones
2.4. Create a buffer zone around BMNP
2.5. Develop co-management grazing agreements with local communities
2.6. Map all key sites and potential corridors
2.7. Assess the feasibility of creation of corridors between core habitats in BMNP (HQ, Gesse Grassland and *Hagenia-Juniperus* woodlands)
2.8. Assess the feasibility of habitat restoration of key corridors in the Arsi-Ahmar Mountains and between PAs and CHAs
2.9. Maintain links and information exchange between protected area and CHA managements
Objective 3: Impacts of drought and climate change are mitigated and managed
3.1. Develop a Mitigation and Adaptation Plan
3.2. Conduct a Climate Change Vulnerability Assessment
Objective 4: Local communities are consulted and engaged in conservation programmes
4.1. Create livelihood benefits for communities through employment, local procurement and an increase in regional tourism
4.2. Raise awareness on the importance of mountain nyala conservation among communities at all sites
4.3. Incorporate the traditional beliefs and indigenous conservation methods (LEK) into the conservation programme
Objective 5: Adequate capacity to manage mountain nyala effectively is provided
5.1. Carry out a capacity and needs assessment
5.2. Provide relevant training and equipment for national park staff and local community monitors
Objective 6: Increase baseline information
6.1. Census the population in all protected areas and CHAs using a standard methodology
6.2. Establish an annual monitoring programme
6.3. Research movements and dispersal using GPS collars
6.4. Use remote sensing to map changes in forest cover
6.5. Enter all records on a national database

Swayne's Hartebeest *Alcelaphus buselaphus swaynei*

Distribution and status

Formerly widespread in the Horn of Africa but now confined to Ethiopia, where its historic range has also contracted. In the 1970s it occurred in Yabello, Senkele, Nech Sar, and east of the Awash River (Bolton 1970). Swayne's hartebeest is now found only in Senkele Swayne's Hartebeest Sanctuary (SSHS) and Maze National Park (MNP). Senkele Swayne's Hartebeest Sanctuary was established in 1976, covers 55 km^2, and lies at 2000-2100 m in elevation. The sanctuary is completely surrounded by settlements, agricultural land, and a high density of livestock. There is no buffer zone. Maze N.P. was established in 2005, covers 202 km^2 and is located at 900–1300 m. Livestock density around and inside the reserve is lower than in Senkele. In May 1974, 120 Swayne's hartebeest were translocated from Senkele to Nech Sar N.P. and 90 to Awash N.P. (Berhanu 1974) but neither population has survived. Population estimates for 2025, based on block counts, were 382 in Senkele and 1507 in Maze, giving a total of 1889. The population in Senkele has declined since 2017, the population in Maze has increased since 2005 (Tamrat et al. 2022; Scholte et al. in prep).

Threats

Poaching: The extent of poaching is unknown. Some animals in SSHS may be at risk of killing by local communities/farmers to protect their crops.

Competition with livestock: Large numbers of cattle enter SSHS to graze in the wet season. Livestock density in MNP is lower.

Habitat loss and degradation: Large quantities of grass are harvested in SSHS. The impact of this activity on palatable forage is not clear.

Low reproductive success: Low recruitment in SSHS is believed to be caused by predation on young by spotted hyena *Crocuta crocuta* and African wolf *Canis lupaster* but it is possible that intraspecific competition is responsible. Currently, reserve rangers carry out patrols during the birth season to reduce predation.

Fragmentation: SSHS and Maze NP lie about 160 km apart and they are isolated from each other. Furthermore, SSHS is completely surrounded by agricultural land severely limiting even local dispersal.

Swayne's hartebeest © Nuru Yimer

Swayne's hartebeest: Recommended Objectives and Actions

Objective 1: Direct mortality of Swayne's hartebeest is reduced
1.1. Ensure that law enforcement and patrolling are effective in both sites
1.2. Monitor and control predators during the birth season in SSHS until the causes of low recruitment are established
Objective 2: Key habitats are protected and managed effectively
2.1. Update site management plans
2.2. Work with communities to reduce grazing pressure in SSHS
2.3. Control bush encroachment in MNP
2.4. Develop fire management plans and fire response teams
2.5. Provide drinking water points in SSHS
2.6. Assess the feasibility of reintroduction to new sites
Objective 3: Impacts of drought and climate change are mitigated and managed
3.1. Develop a Mitigation and Adaptation Plan
3.2. Conduct a Climate Change Vulnerability Assessment
Objective 4: Local communities are consulted and engaged in conservation programmes
4.1. Create livelihood benefits for communities through employment, local procurement and an increase in regional tourism
4.2. Raise awareness on the importance of Swayne's hartebeest conservation among communities at both sites
4.3. Incorporate the traditional beliefs and indigenous conservation methods (LEK) into the conservation programme
Objective 5: Adequate capacity to manage Swayne's hartebeest effectively is available
5.1. Carry out a capacity and needs assessment
5.2. Provide relevant training for protected area staff and local community monitors
Objective 6: Baseline information is increased
6.1. Monitor numbers and recruitment annually
6.2. Assess carrying capacity in SSHS
6.3. Research the causes of low recruitment in SSHS
6.4. Research diet and the effects of grass harvesting in SSHS
6.5. Enter all records onto a national database

Dibatag *Ammodorcas clarkei*

Distribution and status

Endemic to the Horn of Africa. Around 50-75% of the global range lies in the Somali region of Ethiopia. The range lies east of the Farfar and Web Shebelle river valleys, from near Aware, south to the border with Somalia. Dibatag have very specific habitat preferences, occurring only in dense *Acacia-Commiphora* bush on red sands, and avoiding gravelly and stony areas. Its range is therefore naturally local and patchy. In addition to being rare and local, dibatag is shy and elusive and there are many gaps in knowledge of its status and biology which hinder development of effective conservation measures. There are no protected areas within its range, so community-based conservation is essential. A recent local knowledge survey in the Gurdumi area reported that all local people interviewed recognized the dibatag. Most people reported seeing a dibatag more than 10 years ago, supporting other evidence of a population decline. Around 85% of people interviewed supported protection, awareness raising, and reducing livestock pressure.

Dibatag, Somali Region, © Jens-Ove Heckel

Threats

Poaching: Dibatag meat is considered very tasty, but cultural respect for the species ("cultural livestock") reduces hunting pressure, but illegal hunting remains a factor.

Capture of new-borns: herders occasionally find new-born young and keep them as pets

Habitat loss and degradation: Expansion of settlements, clearance of bush, overgrazing, and oil and gas exploration have destroyed or damaged natural habits and increased fragmentation.

Competition with livestock: high numbers of sheep, goats and camels compete for grazing and increase disturbance.

Drought: The frequency of droughts and failure of seasonal rains have increased, adding pressure

Dibatag: Recommended Objectives and Actions

Objective 1: Dibatag populations are protected and managed effectively
1.1. Locate and map all existing populations through questionnaires and field surveys
1.2. Develop grazing co-management agreements in and around key sites
1.3. Create livelihood benefits for communities through employment, local procurement, and an increase in regional tourism
1.4. Set up Site Support Groups in collaboration with local leaders
1.5. Recruit community informants and monitors
1.6. Flag key dibatag sites in ESIAs for oil and gas exploration or other infrastructure developments
Objective 2: Levels of poaching and live capture are reduced
2.1. Further develop awareness of dibatag's rarity and endemic status
2.2. Develop an ID card and publicity material in the local language
2.3. Discourage capture of young through local media and village meetings
Objective 3: Impacts of drought and climate change are mitigated and managed
3.1. Develop a Mitigation and Adaptation Plan
3.2. Conduct a Climate Change Vulnerability Assessment
Objective 4: Adequate capacity to manage dibatag effectively is provided
4.1. Carry out a capacity and needs assessment
4.2. Provide relevant training for staff of the Somali Region government and local community monitors
Objective 5: Increase baseline information
5.1. Conduct population estimates at known sites
5.2. Trial different census and monitoring methods, including use of drones
5.3. Establish a local monitoring network
5.4. Incorporate local beliefs and traditional knowledge (LEK) into the conservation framework
5.5. Evaluate the feasibility of monitoring habitat change through remote sensing
5.6. Enter all records on a national database

Nile Lechwe *Kobus megaceros*

Distribution and status

Most of the Nile lechwe population is found along the White Nile in South Sudan. A transboundary population in the Machar-Gambella ecosystem occurs seasonally in Ethiopia in and around Gambella N.P., formerly south to the Akobo river. The timing and number of Nile lechwe occurring in Gambella vary each year, depending on water levels and other factors. Douma swamp inside Gambella N.P. is a key site. In December 2024, African Parks signed a 10-year agreement with EWCA and the Gambella Regional State to manage Gambella N.P., restore the landscape, and bring significant investment into the region.

Threats

Poaching: occurs inside and outside GNP

Habitat loss and degradation: Caused by large agricultural investments that transform extensive areas of natural habitats; the invasive water hyacinth alien water hyacinth *Eichhornia crassipes* which now covers extensive areas; fires set in the dry season to promote fresh growth of vegetation; expansion of settlements and smallholder agriculture.

Grazing competition: Local communities own large livestock herds that graze in and around GNP. These are supplemented by several thousand cattle brought seasonally by the Falata community who move south from Sudan to Gambella during March and return several months later.

Water abstraction and diversion: Changes in water levels and volume available potentially affect vegetation growth, availability of wet grassland, and Nile lechwe movement patterns. Such changes result from abstraction from the Alwero River, including diversion by a canal to irrigate commercial agriculture. The potential effects of the revitalization of the Alwero Dam (announced in 2024) on Nile lechwe habitats in Gambella are currently unclear.

Nile Lechwe: Recommended Objectives and Actions

Objective 1: Poaching is reduced
1.1. Implement effective anti-poaching measures in GNP
1.2. Use technology assisted surveillance (GPS tracking)
1.3. Utilize predictive analysis based on data on past poaching incidents
1.4. Recruit community informants and monitors
Objective 2: Nile lechwe habitats are managed effectively
2.1. Map movement patterns, corridors, and key feeding areas used by Nile lechwe
2.2. Flag key areas for Nile lechwe in ESIAs for all large developments (commercial agriculture, dams) affecting GNP or the regional hydrology
2.3. Reduce the level of livestock grazing in important habitats
2.3.1. Conduct a baseline impact assessment on Falata community routes and camps
2.3.2. Agree grazing co-management plans in the buffer zone with all communities
2.4. Reduce the impact of dry season fires
2.4.1. Develop a Fire Response Plan
2.4.2. Train a fire brigade team and provide adequate equipment

2.5. Control the effect of water hyacinth on Nile Lechwe habitats
2.5.1. Mobilize community efforts on eradication especially during flowering season
2.5.2. Use mechanical control where feasible
- 2.5.3. Carry out a spatial assessment of areas affected by water hyacinth
2.5.4. Monitor new growth and expansion
Objective 3: Impacts of drought and climate change are mitigated and managed
3.1. Develop Mitigation and Adaptation Plan
3.2. Conduct a Climate Change Vulnerability Assessment
Objective 4: Communities are fully engaged in conservation programmes
4.1. Carry out stakeholder mapping exercise
4.2. Create livelihood benefits for communities around GNP through employment, local procurement and an increase in regional tourism
4.3. Raise awareness on the importance of Nile lechwe conservation among local residents and seasonal herding communities
4.4. Incorporate the traditional beliefs and indigenous conservation methods into the conservation framework
Objective 5: Adequate capacity to manage Nile lechwe and Gambella N.P. effectively is provided
5.1. Carry out a capacity and needs assessment
5.2. Provide relevant training for GNP staff
Objective 6: Transboundary cooperation is assured
6.1. Establish a liaison mechanism with wildlife authorities in South Sudan
6.2. Establish transfrontier conservation area collaborative management between Ethiopia and South Sudan
Objective 7: Baseline information is improved
7.1. Map movement patterns, corridors, key feeding areas used by Nile lechwe
7.2. Deploy satellite tracking collars
7.3. Develop an annual monitoring programme
7.4. Employ community monitors
7.5. Enter all records on a national database

Beisa Oryx *Oryx beisa*

Distribution and status

O. beisa occurs from the Afar Region to the Somali Region and west through Borana to the eastern side of the Omo Valley. The range in Ethiopia has a decline and beisa oryx no longer occurs in several former sites. One stronghold remains the Halledege-Awash plains and adjacent CHAs. In the Somali Region beisa oryx is still present in Geralle N.P. in the southeast, and possibly at other sites. It is also present in Omo N.P. The Beisa oryx population in Ethiopia was thought to be around 5,000 in the mid-1990s but has declined dramatically. Surveys in Awash N.P. show a 77% decline in numbers in the last two decades, with the latest estimate reported at the workshop of only 68 (± 4.7) based on a total count. In Halledege-Assebot N.P. the population is estimated to be around 1120 (Admasu et al. 2016) and in Geralle N.P., 618 (Aychew & Girma 2024). Together these figures suggest a minimum population size of 1806, plus an unknown number in CHAs, Omo N.P., and possibly other sites in the Somali Region. However, these estimates were made at different times, using different methods, so they should be regarded as tentative. A survey across all known sites using a standardized methodology is urgently needed.

Threats

The main threats are poaching, habitat loss and degradation (from overgrazing, bush encroachment, invasive species, large scale agricultural development, drought, and wildfire), disease (anthrax), and roadkill.

Beisa oryx, Awash N.P. © Brent Huffmann

Beisa Oryx: Recommended Objectives and Actions

Objective 1: Direct mortality is reduced
1.1. Implement effective anti-poaching measures in all national parks
1.2. Engage community monitors/rangers in sites outside protected areas
1.3. Provide adequate resources to anti-poaching teams
1.4. Mitigate road mortality by installing speed breaks and signage at key points
1.5. Carry out a Disease Risk Assessment and develop a disease outbreak response mechanism
Objective 2: Key habitats are protected and managed effectively
2.1. Take immediate action to address bush encroachment and invasive species
2.2. Implement controlled burning to manage habitats and enhance the presence of palatable species within HANP
2.3. Reduce numbers of livestock in PAs, protect key habitats from livestock encroachment
2.4. Develop grazing co-management agreements in key sites
2.5. Map connectivity and corridors between known sites
2.6. Assess the feasibility of habitat restoration in Awash N.P.
2.7. Develop a fire response mechanism and team where needed
Objective 3: Impacts of drought and climate change are mitigated and managed
3.1. Develop a Mitigation and Adaptation Plan
3.2. Conduct a species Climate Change Vulnerability Assessment
Objective 4: Local communities are consulted and engaged in conservation programmes
4.1. Carry out stakeholder mapping exercise
4.2. Engage community leaders around national parks and in unprotected sites in planning conservation measures
4.3. Create livelihood benefits for communities through employment, local procurement and an increase in regional tourism
4.4. Raise awareness on the importance of beisa oryx conservation among communities at all sites
4.5. Incorporate the traditional beliefs and indigenous conservation methods into the conservation framework
Objective 5: Adequate capacity to manage beisa oryx effectively is provided
5.1. Carry out a capacity and needs assessment
5.2. Provide relevant training for NP staff and community monitors
Objective 6: Baseline information is improved
6.1. Maintain monitoring programmes in national parks using a standard methodology
6.2. Census populations in CHAs using the same methodology
6.3. Assess population size in Omo N.P.
6.4. Establish status at other sites in the Somali region through questionnaires and field surveys
6.5. Enter all records on a national database
6.6. Assess connectivity between known sites

Soemmerring's gazelle *Nanger soemmerringii*

Distribution and status

The former range in Ethiopia covered the Alledeghi Plains and Awash Valley, through the Somali Region south to the Dawa River, and west to Borana N.P. (Yalden et al. 1984, Bekele and Yalden 2013). A large part of the remaining global range lies within Ethiopia. The stronghold of the species in Ethiopia remains in the Awash-Alledeghi plains and adjacent CHAs. In Awash N.P. Soemmerring's gazelle has disappeared from the Sabobere, Kudu Valley, and Hot Spring areas and today is restricted to the Ilala Sala plain. In the Somali Region, Soemmerring's Gazelle occurred on many plains and numbered in the thousands in the 1960s but was killed in large numbers with automatic weapons during times of political unrest (Wilhelmi 1997). Small groups were known on Banka Holac south of the Shebelle river and southwest of Kebri Dehar (Nogob area) (Wilhelmi et al. 2006). It still occurs on Banka Tur plain, north of Gode but is no longer found on Banka Qorahay and the Bayahaur plain south of Gode. Current presence in other parts of the Somali Region is not well known. Soemmerring's gazelle had virtually disappeared from Borana by the early 1970s (Myers 1973) and none were seen in 1995 during an aerial census of southern Ethiopia including Borana N.P. (Thouless 1996). In Awash N.P., the population declined from 1200 in 1966 to only 12 in 2024. In Halledege-Assebot N.P. it is more abundant due to relatively favourable habitat conditions, the availability of palatable grasses, and the Afar people's respectful attitude toward wildlife (Mamo et al. 2019, HANP report 2019). Analysis of population trends indicates that there was a decline of 48.8%, from 2650 in 1995 to 1356 in 2024. In December 2025, over 300 were counted on the western half of Banka Tur plain. Numbers in other parts of the Somali Region are not well known. The minimum population size is therefore 1668-2000, plus some in CHAs, the eastern half of Banka Tur (perhaps 300), and other parts of the Somali Region. It seems unlikely that total exceed 4000-5000.

Threats

The main threats are:

Poaching: Certain parts of HAPNP and ANP are experiencing a significant increase in the poaching of Soemmerring's gazelle, with fleeing distance well over 1 km (Mamo et al. 2019; HAPNP reports from 2018, 2020, and 2024). In contrast, on recent visits to Banka Tur (up to December 2025), Soemmerring's gazelles showed very short flight distances, indicating a lack of poaching pressure in that area.

Habitat degradation and destruction: due to unrestricted use of natural resources, commercial agriculture, illegal settlement activities, infrastructure development, invasive species, and overgrazing (below).

Grazing competition: livestock numbers are increasing everywhere, along with competition for grassland resources and the disturbance factor.

Invasive alien species: Bush encroachment and aggressive expansion of invasive species such as *Prosopis juliflora, Xanthium strumarium, Abutilon* sp., and *Parthenium hysterophorus*. As well as the native *Calotropis procera.*

Other threats: Human-induced fires; drought, such as during the 2017 El Nino; roadkill along the Ethiopia-Djibouti highway which dissects most of Awash N.P.; and linear infrastructure development, such as railways lacking appropriate underpasses or overpasses for wildlife that increase fragmentation of habitats.

Soemmerring's Gazelle: Recommended Objectives and Actions

Objective 1: Direct mortality is reduced
1.1. Implement effective anti-poaching measures in all PAs
1.2. Engage community monitors/rangers in sites outside protected areas
Objective 2: Key habitats are protected and managed effectively
2.1. Take immediate action to address bush encroachment and invasive species
2.2. Implement controlled burning to manage habitats and enhance the presence of palatable species within HANP
2.3. Reduce encroachment of livestock in PAs
2.4. Develop grazing co-management agreements in key sites
2.5. Map connectivity and corridors between known sites
2.6. Assess feasibility of habitat restoration in Awash N.P.
Objective 3: Impacts of drought and climate change are mitigated and managed
3.1. Develop Mitigation and Adaptation Plan,
3.2. Conduct a Climate Change Vulnerability Assessment
Objective 4: Local communities are consulted and engaged in conservation programmes
4.1. Carry out stakeholder mapping exercise
4.2. Engage community leaders
4.3. Create livelihood benefits for communities around GNP through employment, local procurement and an increase in regional tourism.
4.4. Raise awareness on the importance of Soemmerring's gazelle conservation among communities at all sites
4.5. Incorporate the traditional beliefs and indigenous conservation methods into the conservation framework
Objective 5: Adequate capacity to manage Soemmerring's gazelle effectively is provided
5.1. Carry out a capacity and needs assessment
5.2. Provide relevant training for NP staff and community monitors
Objective 6: Baseline information is improved
6.1. Maintain monitoring programmes in national parks using a standard methodology
6.2. Census populations in CHAs using the same methodology
6.3. Census the population on Banka Tur
6.4. Establish status at other sites in the Somali region through questionnaires and field surveys
6.5. Enter all records on a national database

Species whose status requires confirmation

Tora hartebeest *Alcelaphus buselaphus tora*

***Distribution and status*:** There are no recent records from its former range in northwest Ethiopia, Eritrea and Sudan. Bolton (1973) reported that a small group was seen south of the Tacazze River in 1969; in 1970 a few were seen near Metakil ($11^0$00N, $36^0$30'E); In May 1971 an aerial survey found none between the Balas and Tacazze Rivers; and in March 1972, one was seen during a 2-week foot survey about 50 km south of Metemma. A survey in 2008 failed to find any sign or local report (Heckel 2009, Heckel et al. 2008). Tora hartebeest is most likely extinct but there is a small possibility that remnant subpopulations could survive in remote areas of the north-west. It is assessed as Critically Endangered [Possibly Extinct] on the IUCN Red List.

Key action needed: Confirm current presence in Ethiopia

- Conduct interviews in Alatish N.P., Kafta Humera N.P. and the area between them
- Follow up positive reports with field surveys

Speke's gazelle *Gazella spekei*

***Distribution and status*:** Near-endemic to Somalia, with the known distribution extending west to about 44^0E. In Ethiopia there is a single record from the northern Somali Region on the border with Somalia (Hillman 1988). It is still present on the Aroori Plains in Somaliland, not far from the border with Ethiopia, but the habitat appears unsuitable.

Key action needed: Confirm current presence in Ethiopia

- Conduct questionnaire surveys in the north-east and south-east parts of the Somali Region
- Follow up positive reports with field surveys

Beira *Dorcatragus megalotis*

***Distribution and status*:** First reported in 1889 in the Marmar mountains on the border with Somaliland. Beira were seen in the same location in 1975. Current presence in Ethiopia was confirmed in 2025 (Pohlstrand et al. 2025).

Key action needed: Establish the extent of the Ethiopian range and population size

- Conduct field surveys in and around the Marmar and Haggar Mountains.

Harvey's duiker *Cephalophus harveyi*

***Distribution and status*:** A duiker observed in the Harenna Forest in 1986 was probably Harvey's duiker *Cephalophus harveyi* which occurs in Kenya and southern Somalia (Hillman 1988).

Key action needed*: *Confirm presence of the species in Ethiopia

- Analyse camera trap images from Bale N.P.
- Conduct questionnaire and camera trap surveys in the Bale mountains

Weyns's duiker *Cephalophus weynsi*

***Distribution and status*:** Red duikers reported in Omo N.P. are likely to be this species which occurs in the Imatong Mountains of South Sudan (East 1999; Hart 2013). Camera trap photos

taken in Kafa Biosphere Reserve in 2015 also show duikers which are closest in appearance to this species.

Key action needed*: *Confirm presence of the species in Ethiopia

- Analyse existing camera trap images
- Conduct questionnaire and camera trap surveys in Kafa, Omo N.P. and other sites in the south-west.

Appendix 1. List of participants

Names	Gender	Organization
Kumara Wakjira	M	EWCA, Director General
Solomon Mekonen	M	EWCA
Dr Fekede Regassa	M	EWCA
Temesgen Yadeta	M	EWCA
Fedlu Abdella	M	EWCA
Tsigereda Cherinet	F	EWCA
Abiot Hailu	M	EWCA
Hirut Bedilu	F	EWCA
Gudeta Hika	M	EWCA
Kahsay G/Tensae	M	EWCA
Wondifraw Nega	M	EWCA
Roza Ashebir	F	EWCA
Arega Mekonin	M	EWCA
Dr Fanuel Kebede	M	EWCA
Dr Girma Timer	M	EWCA
Dr Addisu Assefa	M	EWCA
Mihret Ewnetu	M	EWCA
Gebremeskel Gizaw	M	EWCA
Daniel worku	M	EWCA
Desta Bedaso	M	EWCA
Daniel Assefa	M	EWCA
Gebeyaw Dilnesa	M	EWCA
Dr Adane Tsegaye	M	EWCA
Tilahun Teklu	M	EWCA
Mezgebe Seyoum	M	EWCA
Sena Gashe	M	Bale Mountains N.P.
Shamil Kedir	M	Bale Mountains N.P.
Assegid Gebre	M	Gambella N.P.
Melkamu Ayichew	M	Gerale N.P.
Ahmed Idris	M	Halledege-Assebot N.P.
Yeshambel	M	Kafta Humera N.P.
Shimelis	M	Nech Sar N.P.
Nuru Yimer	M	Omo N.P.
Gemechu Leta	M	Senkelle Swayne's Hartebeest Sanctuary
Dr. Bezawork Afework	F	Addis Ababa University
Dr. Messele Yihune	M	Addis Ababa University
Dr Habte Jebessa	M	Addis Ababa University
Dr Zerihun Girma	M	Hawassa University
Gatluwak Gatkoth	M	Gambella University
Wendimagegn Girma	M	Walaita University
Dr. Simeneh Admassu	M	Ethiopia Biodiversity Conservation Think-tank
Dr. Mekbeb Tessema	M	Ethiopia Biodiversity Conservation Think-tank

Yilma Delelegn	M	Ethiopia Biodiversity Conservation Think-tank
Dr. Zelealem Tefera	M	Ethiopia Biodiversity Conservation Think-tank
Mekoya Mamo	M	Ethiopian Heritage Trust
Lakew Berhanu	M	Cheetah Conservation Fund
Hassan Kaariye	M	Biodiversity expert, Somali Region
Chemere Zewude	M	EFCC
Fetene Hailu	M	IFAW
Mehamednur	M	OFWE
Dr Paul Scholte	M	GIZ
Peter Keilb-Bruder	M	KfW
Sisay Shewamene	M	Hunting company
Nassoss Russos	M	Hunting company
Brook Kassa	M	Tour and Travel
Hakan Pohlstrand	M	Tour and travel
Dr. David Mallon	M	IUCN SSC Antelope Specialist Group
Dr Tsion	F	Hawassa University
Tamiru Mekit	M	EWCA
Emewa	F	EWCA
Etaferahu	F	EWCA
Shimelis Tsadik	M	EWCA
Gebriel Assfaw	M	EWCA chief of staff
Mesfin H/Silassie	M	EWCA

Appendix 2. Workshop agenda

Conservation Roadmap and selected Species Action Plan workshop for Ethiopian Antelopes
September 23-25/2025 Ethiopia, Addis Ababa

Time	Session/Activity	Responsibility	Lead/Facilitator
Day One			
09:00-09:30	Welcome and Opening	Opening Ceremony	EWCA/DG
09:30-09:45	Workshop Aims & Process	Workshop Orientation	ASG/EWCA
09:45-10:00	Self-Introductions	Participant Introductions	All Participants
10:00-10:15	Presentation 1	Expert Presentation	Dr. David Mallon
10:15-10:30	Presentation 2	Expert Presentation	Sena Gashe
10:30-10:45	Presentation 3	Expert Presentation	Kahsay G/T
10:45-11:00	Tea/Coffee Break	Informal Networking	Dr Habte Jebessa
11:00-11:15	Presentation 4	Expert Presentation	Dr Simeneh/Paul
11:15-11:30	Presentation 5	Expert Presentation	Dr Messele Yihune
11:30-11:45	Presentation 6	Expert Presentation	Temesgen Yadeta
11:45-12:00	Presentation 7	Expert Presentation	Nuru Yimer
12:00-12:15	Presentation 8	Expert Presentation	Wondifraw Nega
12:30-13:30	Lunch	Break	
13:30-14:00	Status Review: Document & Priority Table	Information Briefing	DM/ASG
14:00-14:30	Status Review: Comments, Updates, Discussion	Interactive Discussion	All Participants
14:30-14:45	Tea/Coffee Break	Informal Networking	
14:45-15:30	Threats to Antelopes: Working Groups	Focused Group Work	Group Facilitators
15:30-16:00	Report Back: Threats	Group Reporting & Feedback	Group Representatives
16:00-16:30	Discussion & Prioritization of Threats	Consensus Building Session	All Participants
Day Two			

09:00-09:15	Recap Day 1 & Agenda Day 2	Workshop Review & Planning	EWCA/ASG
09:15-10:15	Conservation Measures: Working Groups	Collaborative Problem Solving	Group Facilitators
10:15-10:45	Report Back: Conservation Measures	Group Reporting & Feedback	Group Representatives
10:45-11:00	Tea/Coffee Break	Informal Networking	
11:00-11:45	Vision and Goal Setting	Facilitated Visioning Session	EWCA/ASG
11:45-12:30	Strategic Directions/Objectives: Working Groups	Strategic Planning Workshop	Group Facilitators
12:30-13:30	Lunch	Break	
13:30-14:00	Report Back: Strategic Directions/Objectives	Group Reporting & Feedback	Group Representatives
14:00-15:00	Priority Species: Working Groups	Prioritization Workshop	Group Facilitators
15:00-15:30	Report Back: Priority Species	Group Reporting & Feedback	Group Representatives
15:30-16:00	Recap & Next Steps	Summary & Forward Planning	EWCA/ASG
Day Three			
09:00-09:15	Recap Day 2 & Agenda Day 3	Workshop Review & Planning	EWCA/ASG
09:15-10:45	Road Map Outline & Draft Log frame	Planning & Drafting Session	EWCA/ASG
10:45-11:00	Tea/Coffee Break	Informal Networking	
11:00-12:15	Priority Actions	Action Planning Workshop	EWCA/ASG
12:15-13:15	Lunch	Break	
13:15-14:15	Select Species for Full Action Plans (Next Phase)	Decision-Making Session	EWCA/ASG
14:15-15:00	Final Discussion, Q&A	Open Forum	All Participants
15:00-15:15	Tea/Coffee Break	Informal Networking	
15:15-16:00	Closing Remarks	Closing Ceremony	EWCA/DG
16:00	Workshop Ends		

Appendix 3. Welcoming Speech by the Director General of EWCA

Dr David Mallon, IUCN/SSC/Antelope Species Group Chair, Distinguished Guests, Colleagues, Ladies and Gentlemen. It gives me a great pleasure to warmly welcome you all to this important **National Antelope Conservation Roadmap and Action Plan Development Workshop.**

On behalf of the Ethiopian Wildlife Conservation Authority, I would like to extend my sincere appreciation to each of you for being here today. Your presence reflects not only your personal commitment and professional dedication to wildlife conservation, but also your shared vision for a sustainable future for Ethiopia's unique biodiversity**.**

Ethiopia is blessed with extraordinary natural wealth and diversity. Our country harbours a wide range of ecological regions including highland forests, alpine grasslands, arid lowlands, savannas, riverine systems, mountains and valleys that support remarkable wildlife species and spectacular landscapes. Among these, antelopes hold a very special place**.** They are not just only wildlife, but they are an integral part of our ecological systems, our cultural heritage, and our national identity.

We are proud to be home to several important and globally significant antelope species, which includes the majestic Mountain Nyala, the rare Swayne's Hartebeest, and the distinctive Menelik's Bushbuck, among others. These antelopes are more than symbols of biodiversity and play vital ecological roles maintaining the balance of ecosystems, supporting resilience, and contributing to local livelihoods through nature- based tourism and various ecosystem services.

Despite their importance, many of these species are facing serious and growing threats**.** Habitat loss from agricultural expansion, poaching, and human-wildlife conflict are putting immense pressure on their survival. Climate change and land-use changes are making the challenges worse.

The IUCN Red List of Threatened Species indicates evidently that several Ethiopian antelopes are now listed as Endangered or Vulnerable. This is a wake-up call for all of us and the reason why we are here today. The development of a National Antelope Conservation Roadmap and Action Plan is not simply a technical exercise, but it is a national imperative.

This workshop gives us a unique platform to bring together government, academia, conservation partners, and communities to design a practical, science-based, and participatory plan for antelope conservation in Ethiopia with a goal to safeguard these remarkable species for future generations.

It is important to remember that conservation is not only about saving species, but it is about protecting the entire ecosystems, supporting sustainable livelihoods, and promoting harmony between people and nature. By conserving antelopes, we contribute to healthier landscapes, more resilient ecosystems, and sustainable development for Ethiopia. At this point, I would like to recognize and sincerely thank Dr. David Mallon (IUCN/SSC Antelope Specialist Group) chair for his unreserved technical and financial support to make this National Antelope Conservation and roadmap Action Plan development a reality. Your contribution is a testament to the importance of global collaboration in wildlife conservation.

Esteemed participants, I encourage you to actively engage to share your knowledge, challenges and best practices and help us to design solutions that are both ambitious and practical. The success of this Action Plan will depend on the collective wisdom and commitment of everyone here.

In conclusion, I would like to reaffirm the strong commitment of the Ethiopian Wildlife Conservation Authority to ensuring the protection and sustainable management of our antelopes and their natural habitat. With your support and collaboration, I am confident that we can reverse the current declines and secure a better future for Ethiopia's unique antelope species.

With these remarks, I once again extend a warm welcome to you all, and I am honoured to officially declare the National Antelope Conservation Roadmap and Action Plan Development Workshop is opened.

Thank you.

Appendix 4. Species summaries (excluding species covered in section 7)

The information below is based on the following sources: Yalden et al. (1984), Hillman (1988), East (1999), Bekele and Yalden (2013), Kingdon and Hoffmann (2013), the IUCN Red List (www.iucnredlist.org), published papers, and information reported at the 2025 workshop.

Mountain nyala *Tragelaphus buxtoni*

See section 7.

Bushbuck *Tragelaphus scriptus*

The bushbuck is widespread across sub-Saharan Africa from Senegal east to Eritrea and south to South Africa. Several recent studies of mitochondrial DNA indicate that there are two divergent lineages, one in the north and west and another in the south and east and that these may represent two distinct species (see Plumptre and Wronski 2013 for details and discussion). The traditional treatment as a single species is followed here provisionally, in line with Plumptre and Wronski (2013), and awaiting results of analysis of nuclear DNA data. There are some isolated populations, such as Menelik's Bushbuck in the Bale Mountains, which has a very distinctive phenotype.

***Ethiopia*:** Bushbuck are widespread in bush zones along the west and centre of the country from the Eritrean border to the Omo Valley, extending eastwards to the Bale and Chercher mountains. They are absent from arid areas of the east and south-east except for small populations along the Web Shebelle. Menelik's bushbuck *T. s. meneliki* is a very dark-coloured form found in the Bale and Chercher Mountains, and similar dark forms occur in other parts of the highlands. Populations in the lowlands of the north-west, west and south have browner pelage. Other forms reported are *T. s. decula* in the north and *T. scriptus delamerei* in the south but more research is needed to confirm the identity of most Ethiopian populations and the boundaries between them.

Greater kudu *Tragelaphus strepciseros*

Widely distributed from Chad in the west, across eastern and southern Africa.

***Ethiopia*:** Greater kudu is widely distributed in northwest Ethiopia and along the Rift Valley from Awash to Lake Chew Bahir. It is also found at lower densities in western parts of the Somali Region. It occurs in several protected areas and is locally common.

Lesser kudu *Tragelaphus imberbis*

The global range extends from Ethiopia through southern Somalia, Kenya to northern Tanzania.

***Ethiopia*:** Found in arid bush zones from the Afar Region south through the Ogaden and west through the Rift Valley to the eastern side of the Omo River. It occurs in several protected areas.

Common eland *Tragelaphus oryx*

Widely distributed in eastern and southern Africa.

***Ethiopia*:** Occurs seasonally during the rainy season, October to March, on the west bank of the lower Omo River in the area of Omo NP (Bekele and Yalden 2013). Numbers have declined in recent years.

Waterbuck *Kobus ellipsiprymnus*

Widely distributed in Africa south of the Sahara. The two subspecies occur in Ethiopia.
***Ethiopia*:** The defassa waterbuck *K. e. defassa* occurs throughout the western half of the country from the northern border to the Omo Valley, the Rift Valley and Awash Valley.

The common waterbuck *Kobus e. ellipsiprymnus* is restricted to lower parts of the Web Shebelle and Genale rivers.

Defassa waterbuck © Habte Jebessa Debella

Kob *Kobus kob*

Africa: Three subspecies are widely distributed in wet grasslands and floodplains in West, Central and East Africa, from Senegal to Uganda.
***Ethiopia*:** White-eared kob *Kobus kob leucotis* occurs seasonally in March-May in the Gambella region when several thousand move from the Sudd ecosystem of South Sudan up the Akobo, Baro, Pibor and other river valleys, returning to South Sudan in the rainy season (Bekele and Yalden 2013).

Nile Lechwe *Kobus megaceros*

See section 7.

Bohor reedbuck *Redunca redunca*

The global range extends across West and Central Africa and south to Tanzania.
***Ethiopia*:** Widespread in the west (north to Alatish NP) and centre of the country, extending east to Bale Mountains N.P. It is absent from drier zones of the east, south and south-east.

Mountain reedbuck *Redunca fulvorufula*

Three isolated subspecies are recognised, in West, East and Southern Africa respectively.
***Ethiopia*:** Chanler's mountain reedbuck *Redunca fulvofula chanleri* has a patchy distribution in hills and mountains of the Rift Valley, north to Mount Fantale in Awash NP. This subspecies' range extends through Kenya to northern Tanzania.

Roan antelope *Hippotragus equinus*

Widely distributed across sub-Saharan Africa.
***Ethiopia*:** The species is distributed along the western edge of Ethiopia from Kafta Humera N.P. in the north to Gambella.

Beisa oryx *Oryx beisa*

See section 7.

Hartebeest *Alcelaphus buselaphus*

Widespread across sub-Saharan Africa. Eight subspecies are recognized, three of which occur in Ethiopia.
Tora hartebeest *A. b. tora*:
See section 7.
Swayne's hartebeest *A. b. swaynei*:
See section 7.

Lelwel hartebeest *A. b. lelwel*: occurs from the western side of the Omo River to Gambella N.P. (Bekele and Yalden 2013). A hybrid or intergrade form in Mago N.P. is believed to be a hybrid between *A. b. lelwel* and *A. b. swaynei,* often referred to as Neuman's hartebeest.

Lelwel hartebeest © Nuru Yimer

Tiang *Damaliscus lunatus*

Widely distributed in sub-Saharan Africa. Six subspecies are recognized.
***Ethiopia*:** *Damaliscus lunatus tiang* occurs at the eastern edge of its range between the Atbara River and Lake Chew Bahir.

Gerenuk *Litocranius walleri*

This species' range extends through north-east and east Africa south to northern Tanzania.
***Ethiopia*:** Widely distributed from the lower Awash Valley south through the Somali Region, west through Borana and the southern Rift Valley to the west bank of the Omo River.

Dibatag *Ammodorcas clarkei*

See section 7.

Soemmerring's gazelle *Nanger soemmerringii*

See section 7.

Grant's gazelle *Nanger granti*

This species' range extends from south-central Ethiopia to northern Tanzania. Three genetic clusters have been identified, provisionally regarded as subspecies in *Mammals of Africa* (Kingdon and Hoffmann 2013). There is a lot of morphological variation in horn length and shape and coat colour and flank stripe.

***Ethiopia*:** The range formerly extended through the southern Rift Valley north to Lake Ziwai, but it has apparently never been recorded north of the Awash River. It still occurs in Lake Abiata-Shala NP and several areas further south, including on the Sarite Plains. This area lies within the range of Bright's gazelle *Nanger granti notata.*

Grant's gazelle, bachelor group © Mesele Yihune

Speke's gazelle *Gazella spekei*

See section 7

Dorcas gazelle *Gazella dorcas*

The global range extends across the whole Sahara-Sahel region, and south through Eritrea, Djibouti, northern Somalia and Ethiopia.

***Ethiopia*:** Restricted to arid parts of the lower Awash Valley, Danakil, and other parts of the Afar region.

Heuglin's gazelle *Eudorcas tilonura*

Formerly regarded as a subspecies of Red-fronted gazelle *G. rufifrons* but tentatively treated as a full species by *Mammals of Africa* and the IUCN Red List. Its global range is restricted to the east of the Blue Nile.

***Ethiopia*:** Still occurs in Kafta Humera N.P. which probably holds the single largest remaining population, yet its status may well have changed due the impact of the northern war. There

are no records of Heuglin's gazelle from Alatish N.P. although it occurs in the adjoining Dinder N.P. in Sudan. The Ethiopian population probably numbers only a few hundred.

Mongalla gazelle *Eudorcas albonotata*

Formerly regarded as a subspecies of Red-fronted gazelle *G. rufifrons* but is tentatively treated as a full species by *Mammals of Africa* and the IUCN Red List. Its global range is concentrated in the Sudd region of South Sudan.

***Ethiopia*:** A small, isolated population occurs in the Oma-Mago region.

Klipspringer *Oreotragus oreotragus*

Widely distributed in suitable rocky habitats across sub-Saharan Africa.

***Ethiopia*:** Patchily distributed in Simien, Arsi, Bale and Chercher highlands and rocky sites in the Rift Valley to Lake Chew Bahir (Bekele and Yalden 2013).

Silver dik-dik *Madoqua piacentinii*

Formerly considered to be endemic to the Hobyo coastal region of Somalia before it was discovered in the Ogaden of Ethiopia.

***Ethiopia*:** Confirmation of the Silver dik-dik's occurrence in Ethiopia was provided by an animal killed on the road in the Ogaden in the 1990s and during field surveys it was found to occur quite widely around Kebre Dehar (Wilhelmi et al. 2006). In 2016 it was discovered near Aware, extending the known area of distribution to the north-west. It is believed to occur across the eastern Somali Region (Mallon et al. 2024). Ethiopia may hold at least half the global population.

Salt's dik-dik *Madoqua saltiana*

Endemic to the Horn of Africa. Several subspecies described based on pelage colour, but these may represent a cline (Yalden 2013). The boundaries between the described forms are not precisely delineated and it is not clear in every case to which form an individual animal should be assigned.

***Ethiopia*:** The species is widely distributed in arid zones of the east and southeast. Salt's dikdik is very common in the Somali Region but appears to be less numerous in the northern part of its range.

Guenther's dik-dik *Madoqua guentheri*

Endemic to the Horn of Africa and East Africa south to northern Kenya and north-east Uganda.

***Ethiopia*:** Widespread in arid habitats from the Somali Region to the Omo Valley. The subspecies *M. g. guentheri* occurs northeast of Web Shebelle and *M. g. smithi* to the southwest and across the south.

Beira *Dorcatragus megalotis*

Endemic to the Horn of Africa. About 95% of the distribution lies in northern Somalia and southern Djibouti.

***Ethiopia*:** Known only from one site close to the border with Djibouti and Somaliland. Four were shot in 1899 in the 'Marmar' mountains near Arroweina, close to the borders with Somaliland and Djibouti (Powell-Cotton 1902). A few animals were observed in the same location in the early 1970s (Bolton 1976). In February 2025, beira tracks and droppings were

found in the Marmar mountains, and two groups of four animals were seen on Harreg mountain a short way to the north, 18 km from the Djibouti border and 17 km from Somaliland (Pohlstrand et al. 2025).

Oribi *Ourebia oribi*

Widely distributed throughout sub-Saharan Africa.

***Ethiopia*:** Widespread in savanna and bush zones of the west of the country, from Kafta Humera N.P. in the north-west, south to the Omo Valley and the Rift Valley. It is absent from arid zones of the east and southeast and the forests of the southwest (Bekele and Yalden 2013).

Bush duiker *Sylvicapra grimmia*

Very widely distributed throughout sub-Saharan Africa.

***Ethiopia*:** Occurs in bush habitats in most of the country including the Bale and Arsi mountains but not in the arid zones of the east and south-east.

Harvey's duiker *Cephalophus harveyi*

Distributed across East Africa.

Ethiopia: A duiker observed in the Harenna Forest in 1986 was probably Harvey's duiker *Cephalophus harveyi* which occurs in Kenya and southern Somalia (Hillman 1988).

Weyns's duiker *Cephalophus weynsi*

Distributed across Central Africa.

Ethiopia: Red duikers reported in Omo NP are likely to be this species, which occurs in the Imatong Mountains of South Sudan (East 1999; Hart 2013). Camera trap photos taken in Kafa Biosphere Reserve in 2015 also show duikers which are closest in appearance to this species (Bauer et al. 2023).

Oribi, Senkele © ASG

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