

= Mountain nyala =

The mountain nyala (*Tragelaphus buxtoni*) or balbok is an antelope found in high altitude woodland in a small part of central Ethiopia . It is a monotypic species (without any identified subspecies) first described by English naturalist Richard Lydekker in 1910 . The males are typically 120 ? 135 cm (47 ? 53 in) tall while females stand 90 ? 100 cm (35 ? 39 in) at the shoulder . Males weigh 180 ? 300 kg (400 ? 660 lb) and females weigh 150 ? 200 kg (330 ? 440 lb) . The coat is grey to brown , marked with two to five poorly defined white strips extending from the back to the underside , and a row of six to ten white spots . White markings are present on the face , throat and legs as well . Males have a short dark erect crest , about 10 cm (3 @. @ 9 in) high , running along the middle of the back . Only males possess horns .

The mountain nyala are shy and elusive towards human beings . Four to five individuals may congregate for short intervals of time to form small herds . Males are not territorial . Primarily a browser , the mountain nyala may switch to grazing occasionally . Females start mating at two years of age , and males too become sexually mature by that time . Gestation lasts for eight to nine months , after which a single calf is born . The lifespan of a mountain nyala is around 15 to 20 years .

The typical habitat for the mountain nyala is composed of montane woodlands at an altitude of 3 @, @ 000 ? 3 @, @ 400 m (9 @, @ 800 ? 11 @, @ 200 ft) . Human settlement and large livestock population have forced the animal to occupy heath forests at an altitude of above 3 @, @ 400 m (11 @, @ 200 ft) . Mountain nyala are endemic to the Ethiopian highlands east of the Rift Valley , between 6 ° N and 10 ° N. Up to half of the total population of the mountain nyala occurs in the 200 km² (77 sq mi) area of Gaysay , in the northern part of the Bale Mountains National Park . The mountain nyala has been classified under the Endangered category of the International Union for Conservation of Nature and Natural Resources (IUCN) . Their influence on Ethiopian culture is notable , with the mountain nyala being featured on the obverse of Ethiopian ten cents coins .

= = Taxonomy = =

The mountain nyala was first described by English naturalist Richard Lydekker in 1910 . Its scientific name is *Tragelaphus buxtoni* . The species has been classified under the genus *Tragelaphus* of the family Bovidae . The mountain nyala was first brought to England in 1908 by Major Ivor Buxton , after whom the species has been named . Major Buxton , who had returned from a hunting trip in Ethiopia , first presented a specimen he had shot to British taxidermist Rowland Ward , who later on notified Lydekker about the discovery . It was the last large antelope to be discovered in Africa . The spiral horns and white markings on the face and across the flanks established it as a species of *Tragelaphus* . Lydekker believed that the species was related more closely to the nyala (*T. angasii*) than to the two kudu species (then placed under the genus *Strepsiceros*) . In fact , mountain nyala 's similarity to both *Tragelaphus* and *Strepsiceros* led to the merger of the latter into the former genus .

In 2005 , Sandi Willows @- @ Munro of the University of KwaZulu @- @ Natal (Durban) carried out a mitochondrial analysis of the nine *Tragelaphus* species. mtDNA and nDNA data were compared . The results showed that the mountain nyala is sister taxon to kéwel (*T. scriptus*) , sitatunga (*T. spekii*) and bongo (*T. eurycerus*) in the mitochondrial tree (phylogenetic relationships obtained using mitochondrial data) . However , in the nuclear tree , kéwel , mountain nyala and sitatunga plus the bongo are three equal branches . Hence the mountain nyala forms a monophyletic clade with these three species . The greater kudu clade split from the clade formed by mountain nyala , bongo , sitatunga and kéwel approximately 8 @. @ 6 million years ago .

= = Description = =

The mountain nyala is a large sexually dimorphic bovid . The head @- @ and @- @ body length is approximately is 240 ? 260 cm (94 ? 102 in) in males and 190 ? 200 cm (75 ? 79 in) in females .

The males are typically 120 ? 135 cm (47 ? 53 in) tall while females stand 90 ? 100 cm (35 ? 39 in) at the shoulder . Males weigh 180 ? 300 kg (400 ? 660 lb) and females weigh 150 ? 200 kg (330 ? 440 lb) . The bushy tail reaches the heel , and is 20 ? 25 cm (7 @. @ 9 ? 9 @. @ 8 in) long . The sensitive ears are large and lined with white hair .

The coat is grey to brown , marked with two to five poorly defined white strips extending from the back to the underside , and a row of six to ten white spots . White markings are present on the face , throat and legs as well . The white chevron between the eyes and the white patch on the throat are among the most conspicuous markings . The chest and the rump are white . The lower part of the legs are pale on the inside and clear white spots are present just above the hooves . The coat is fawn brown in male juveniles , and grows darker with age , eventually becoming charcoal in old bulls . Males have a short dark erect crest , about 10 cm (3 @. @ 9 in) high , running along the middle of the back , from the neck to the tail . Coat texture may vary from smooth to rough , probably by season . Females resemble the red deer hind in size and proportions . Female juveniles are a bright rufous , and old females are as grey as young males . Females have two pairs of inguinal nipples .

Only males possess horns , whose maximum recorded length is 188 cm (74 in) . Horns appear as cream @-@ coloured nubs at around six months and start growing in a spiral pattern , reaching full growth by two years . The horns have only one or two spirals , though a few males have been reported to have two @-@ and @-@ a @-@ half turns . The final form might vary in different males ? the horns could form well @-@ defined spirals , or could diverge in a structure similar to a lyre , resembling the horns of an impala , but with the final spiral incomplete . Growth rings are visible on the horn sheaths , but the annual patterns might be difficult to comprehend . Though the horns might wear out with age , the cream colour of the tips persists .

The mountain nyala resembles the greater kudu in that both have an array of white spots along their flanks and possess spiral horns . However , the greater kudu can be told apart from the mountain nyala due to the former 's greater height and paler colour . Moreover , the horns in greater kudu have two to three spirals , and the tips are farther apart . Another species similar to the mountain nyala is the nyala , but the latter can be easily distinguished from the former due to its smaller size and a fringe of long hair along its throat and neck . The horns of nyala , though very similar , are slender and narrower .

= = Ecology and behaviour = =

The mountain nyala are shy and elusive towards human beings . They spend the night on the edges of forests , feeding part of the time . To avoid human disturbance , they choose to navigate at night . They come out in morning and late afternoon to browse in grasslands . They generally seek cover in woodlands and heather thickets when it is very hot or cold . Feeding may occur in midday , but is interspersed with resting intervals . They tend to come out when it is overcast or raining . In the dry season (November to March) , given the dilapidated state of grasslands , the mountain nyala travel up to the wooded areas rich in ericaceous heath .

Four to five individuals may congregate for short intervals of time to form small herds . However , groups containing as many as 100 individuals have been reported from the Bale Zone , composed of several family units moving in and out periodically . Size and longevity of such large herds depends upon the season , habitat type and the time of the day . Female and juvenile groups have adult females accompanied by a calf of her previous year and another of the current year . These groups are led by adult males , depending on the presence of oestrus . Bachelor herds are formed by non @-@ dominant adult bulls and young males , consisting of up to 13 individuals . Mixed sex groups may also be formed . Old bulls tend to lead a solitary life , though they may occasionally visit female herds looking for females in oestrus . Dominance hierarchies are observed in both sexes .

Males are not territorial , and have home ranges covering 15 ? 20 km² (5 @. @ 8 ? 7 @. @ 7 sq mi) in the wet season . Females and juveniles , on the other hand , occupy much smaller ranges of about 5 km² (1 @. @ 9 sq mi) in the wet season . Dry season ranges are much larger than the wet season ones for both sexes . Males often wrestle using their horns . Though usually silent , the mountain nyala may " cough " noticing a potential threat , or utter a low bark if the threat is more

serious . The leopard is the main predator of the mountain nyala .

= = = Diet = = =

Primarily a browser , the mountain nyala may switch to grazing occasionally . It feeds on low @-@ height herbs , bushes , shrubs and general foliage . They might even eat lichens , ferns and aquatic plants . Grasses are specially preferred during the early wet season . They pick up fallen leaves and use their horns to reach higher branches . Favoured species include *Artemisia afra* (sage brush) , *Hypericum revolutum* , *Kniphofia foliosa* , *Solanum sessilistellatum* and *Hagenia abyssinica* leaves . They prefer *Alchemilla rotti* , *Helichrysum splendidum* and lower foliage of *Lobelia rynchopetalum* .

= = = Reproduction = = =

Females start mating at two years of age , and males too become sexually mature by that time . Sexual dimorphism , larger home ranges for males , and a female @-@ biased population indicate polygyny in the species . The mountain nyala breed throughout the year , but the peak occurs in December . Prior to and during the breeding season the adult males tend to get associated with mixed sex herds . Bulls continuously follow receptive females and test their vulvas . Three to four males may seek a single female , and , if equally ranked in hierarchy , may engage in circling displays . In these displays the males move very slowly and stiffly , with the crest on the back erect and the tail raised . They are less likely to engage in aggressive fights , which , if they happen , last only for a brief period . Flehmen follows vulva @-@ testing .

Gestation lasts for eight to nine months , after which a single calf is born . In the Bale Mountains National Park , births occur throughout the year , but peak from September to November . Calves remain in cover for the first few weeks after birth . The calves remain close to their mothers for nearly two years . The young females may get pregnant by then . The young males , as they mature by two years , are challenged by other males and driven out of their herds . The lifespan of a mountain nyala is around 15 to 20 years .

= = Habitat and distribution = =

The typical habitat for the mountain nyala is composed of montane woodlands at an altitude of 3 @, @ 000 ? 3 @, @ 400 m (9 @, @ 800 ? 11 @, @ 200 ft) . The vegetation generally includes Juniper , Podocarpus and Olea at lower levels and Haegenia , Juniper and Hypericum in the upper reaches . They often visit the edges of montane grasslands at 2 @, @ 800 ? 3 @, @ 100 m (9 @, @ 200 ? 10 @, @ 200 ft) , which is covered with *Artemesia afra* , *Kniphofia* and evergreen *Hypericum* species .

Nowadays the continuous blocks of woodland habitat have been reduced to a series of pockets , interspersed in large cultivated lands . Human settlement and large livestock population have forced the animal to occupy heath forests at an altitude of above 3 @, @ 400 m (11 @, @ 200 ft) rich in Erica , Phillippia , Hypericum , Euphorbia and Helichrysum species . They may even be forced into afromontane grasslands containing *Alchemilla* and *Festuca* species , at an altitude of up to 4 @, @ 300 m (14 @, @ 100 ft) . In the eastern borders of its range , the mountain nyala has usually been observed to occupy areas at lower altitudes of about 1 @, @ 800 ? 2 @, @ 400 m (5 @, @ 900 ? 7 @, @ 900 ft) .

Mountain nyala are endemic to the Ethiopian highlands east of the Rift Valley , between 6 ° N and 10 ° N. Their former range was from Mount Gara Muleta in the east to Shashamene and the northern Bale Zone to the south . Up to half of the total population of the mountain nyala occurs in the 200 km² (77 sq mi) area of Gaysay , in the northern part of the Bale Mountains National Park . Smaller relict populations occur in Chercher , mountains such as Chilalo in Arsi Zone , and the western Bale . A study identified an area of 39 @. @ 38 km² (15 @. @ 20 sq mi) on the southern escarpment of the Bale Mountains as the most sustainable habitat for the mountain nyala .

= = Threats and conservation = =

Major threats to the survival of the mountain nyala include illegal hunting , habitat destruction , encroachment by livestock , predation of calves by dogs , expansion of montane cultivation and construction at high altitudes . The animal is extensively hunted for its horns and meat . The meat is utilised in local medicine and for making nipples for traditional milk bottles . Impact of trophy hunting programs is obscure , and current trophy hunting quotas have been deemed unsustainable in the long term .

The mountain nyala has been classified under the Endangered category of the International Union for Conservation of Nature and Natural Resources (IUCN) . It has not been listed under the Washington Convention (CITES) . Though legal protection has been fully ensured for the species , the implementation has not been so effective . In 1991 , there was widespread unrest in Ethiopia during which several mountain nyala were killed and the population in the Bale Mountains National Park fell to 150 . After the Bale Mountains National Park , the small Kuni @-@ Muktar Mountain Nyala Sanctuary was established in 1990 was established as a second protected area . But by 1996 the sanctuary had been so severely affected by deforestation , poaching , cultivation and gully erosion , that the populations soon disappeared from there .

In the 1960s , the population was estimated at 7 @,@ 000 to 8 @,@ 000 (and perhaps up to 12 @,@ 500) . This declined sharply to 2 @,@ 000 to 4 @,@ 000 individuals in the 1980s . The population is decreasing even now . The mountain nyala is feared to be extinct in the eastern and southern extremes of its range , though a few probably survive in Chiro (Asebe Teferi) and the border between Bale and Sidamo , south of Kofele . Apart from Gaysay about 80 to 120 mountain nyala occur in the rest of the Bale Mountains National Park , and a few hundred occur in the areas in the vicinity of the national park .

= = Relationship with humans = =

The influence of the mountain nyala , as well as the nyala , on Ethiopian culture can not be ignored . Although nyala is a South African word , several prominent businesses such as Nyala Motors use it in their names . The nyala and mountain nyala often regularly appear on walls , commercial products and tourist curios . The mountain nyala is featured on the obverse of the Ethiopian ten cents coin .

Mountain nyala are hunted by humans , for instance , by the Oromo people . The Oromo do not hunt these animals in general , except for a day close to Easter , when all able @-@ bodied men set out on horses for a hunt .