

= Common eland =

The common eland (*Taurotragus oryx*), also known as the southern eland or eland antelope , is a savannah and plains antelope found in East and Southern Africa . It is a species of the family Bovidae and genus *Taurotragus* . It was first described by Peter Simon Pallas in 1766 . An adult male is around 1 @. @ 6 metres (5 ') tall at the shoulder (females are 20 centimetres (8 ") shorter) and can weigh up to 942 kg (2077 lbs) with an average of 500 ? 600 kilograms (1 @, @ 100 ? 1 @, @ 300 lb , 340 ? 445 kilograms (750 ? 980 lb) for females) . It is the second largest antelope in the world , being slightly smaller on average than the giant eland .

Mainly a herbivore , its diet is primarily grasses and leaves . Common elands form herds of up to 500 animals , but are not territorial . The common eland prefers habitats with a wide variety of flowering plants such as savannah , woodlands , and open and montane grasslands ; it avoids dense forests . It uses loud barks , visual and postural movements and the flehmen response to communicate and warn others of danger . The common eland is used by humans for leather , meat , and rich , nutritious milk , and has been domesticated in many areas .

It is native to Botswana , Burundi , the Democratic Republic of the Congo , Ethiopia , Kenya , Lesotho , Malawi , Mozambique , Namibia , Rwanda , South Africa , South Sudan , Swaziland , Tanzania , Uganda , Zambia and Zimbabwe but is no longer present in Burundi and Angola . While the common eland 's population is decreasing , it is classified as " Least Concern " by the International Union for Conservation of Nature (IUCN) .

= = Etymology = =

The scientific name of the common eland is *Taurotragus oryx* , composed of three words : tauros , tragos and oryx . Tauros is Greek for a bull or bullock , meaning the same as the Latin taurus . Tragos is Greek for a male goat , referring to the tuft of hair that grows in the eland 's ear and its resemblance to a goat 's beard . Oryx is Latin and Greek (generally orygos) for pickaxe , referring to the pointed horns of North African antelopes like the common eland and scimitar @-@ horned oryx .

The name ' eland ' is Dutch for " elk " or " moose " . It has a Baltic source similar to the Lithuanian élnis , which means " deer " . It was borrowed earlier as ellan (French) in the 1610s or Elend (German) . When Dutch settlers came to the Cape Province , they named it after the large , herbivorous moose . In Dutch the animal is called " Eland antelope " to distinguish it from the moose , which is found in the northern boreal forests .

= = Physical description = =

Common elands are spiral @-@ horned antelopes . They are sexually dimorphic , with females being smaller than the males . Females weigh 300 ? 600 kg (660 ? 1 @, @ 320 lb) , measure 200 ? 280 cm (79 ? 110 in) from the snout to the base of the tail and stand 125 ? 153 cm (49 ? 60 in) at the shoulder . Bulls weigh 400 ? 942 kg (882 ? 2 @, @ 077 lb) , are 240 ? 345 cm (94 ? 136 in) from the snout to the base of the tail and stand 150 ? 183 cm (59 ? 72 in) at the shoulder . The tail is 50 ? 90 cm (20 ? 35 in) long . Male elands can weigh up to 1 @, @ 000 kg (2 @, @ 200 lb) .

Their coat differs geographically , with elands in north Africa having distinctive markings (torso stripes , markings on legs , dark garters and a spinal crest) that are absent in the south . Apart from a rough mane , the coat is smooth . Females have a tan coat , while the coats of males are darker , with a bluish @-@ grey tinge . Bulls may also have a series of vertical white stripes on their sides (mainly in parts of the Karoo in South Africa) . As males age , their coat becomes more grey . Males also have dense fur on their foreheads and a large dewlap on their throats .

Both sexes have horns with a steady spiral ridge (resembling that of the bushbuck) . The horns are visible as small buds in newborns and grow rapidly during the first seven months . The horns of males are thicker and shorter than those of females (males ' horns are 43 ? 66 centimetres (17 ? 26 in) long and females ' are 51 ? 69 centimetres (20 ? 27 in) long) , and have a tighter spiral .

Males use their horns during rutting season to wrestle and butt heads with rivals , while females use their horns to protect their young from predators .

The common eland is the slowest antelope , with a peak speed of 40 kilometres (25 mi) per hour that tires them quickly . However , they can maintain a 22 kilometres (14 mi) per hour trot indefinitely . Elands are capable of jumping up to 2 @.@ 5 metres (8 ft 2 in) from a standing start when startled (up to 3 metres (9 @.@ 8 ft) for young elands) . The common eland 's life expectancy is generally between 15 and 20 years ; in captivity some live up to 25 years .

Eland herds are accompanied by a loud clicking sound that has been subject to considerable speculation . It is believed that the weight of the animal causes the two halves of its hooves to splay apart , and the clicking is the result of the hoof snapping together when the animal raises its leg . The sound carries some distance from a herd , and may be a form of communication .

= = Taxonomy = =

The common eland was first described in 1766 by the German zoologist and botanist Peter Simon Pallas . It belongs to the order Artiodactyla , family Bovidae and subfamily Bovinae . Common elands are sometimes considered part of the genus *Tragelaphus* on the basis of molecular phylogenetics , but are usually categorized as *Taurotragus* , along with the giant eland (*T. derbianus*) .

= = = Subspecies = = =

Three subspecies of common eland have been recognized , though their validity has been in dispute .

T. o. livingstonii (Sclater , 1864 ; Livingstone 's eland) : also called *kaufmanni* , *niediecki* , *selousi* and *triangularis* . It is found in the Central Zambezian Miombo woodlands . Livingstone 's eland has a brown pelt with up to twelve stripes .

T. o. oryx (Pallas , 1766 ; Cape eland) : also called *alces* , *barbatus* , *canna* and *oreas* . It is found in south and southwest Africa . The fur is tawny , and adults lose their stripes .

T. o. pattersonianus (Lydekker , 1906 ; East African eland or Patterson 's eland) : also called *billingae* . It is found in east Africa , hence its common name . Its coat can have up to 12 stripes .

= = Diseases and parasites = =

Common elands are resistant to trypanosomiasis , a protozoan infection that has the tsetse fly as a vector , but not to the *Rhipicephalus* @-@ transmitted disease theileriosis . The disease @-@ causing bacteria *Theileria taurotragi* has caused many eland deaths . *Clostridium chauvoei* , another bacterium , can be harmful as well . Eland are also hosts to several kinds of ticks . In one study an eland was found to be host to the *Amblyomma* species *A. gemma* and *A. variegatum* , and *Rhipicephalus* species *R. decoloratus* , *R. appendiculatus* , *R. evertsi* , *R. pulchellus* and *R. pravus* . Elands produce antibodies for *Brucella* bacteria , but none for *Mycobacterium paratuberculosis* or various types of pneumonia like contagious bovine pneumonia and contagious caprine pneumonia , normally infectious in cows or antelopes .

= = Genetics and evolution = =

Male elands have 31 diploid chromosomes and females have 32 . The male (Y) chromosome has been translocated to the short arm of an autosome . Both the X and Y replicate late ; they do not match well and are variable . The chromosomes resemble those of the greater kudu (*Tragelaphus strepsiceros*) .

Male elands and female greater kudus can produce a viable male hybrid , though it is not known if it is sterile . An accidental crossing of an east African common eland (*T. o. pattersonianus* ') with an east African kudu (*T. s. bea*) occurred in the San Diego Zoo Safari Park . This was believed to be

due to the absence of male kudus in the herd . The hybrid produced was sterile , which was unexpected before the study . The study conformed the chromosome numbers of both the eland and the kudu and the strangeness of their attached Y chromosomes . Reports state that repeated matings of male elands with domestic (*Bos primigenius*) and zebu cows (*Bos indicus*) have also produced sterile hybrids . Female elands can also act as surrogates for bongos .

The Bovidae family ancestors of the common eland evolved approximately 20 million years ago in Africa ; fossils are found throughout Africa and France but the best record appears in sub-Saharan Africa . The first members of the tribe Tragelaphini appear 6 million years in the past during the late Miocene . An extinct ancestor of the common eland (*Taurotragus arkelli*) appears in the Pleistocene in northern Tanzania and the first *T. oryx* fossil appears in the Holocene in Algeria .

In 2010 , a genetic study was made basing on the evolutionary history of common elands . Located in the sub-Saharan savanna biome of east and southern Africa , the study used methods like analysis of mitochondrial DNA control region fragments from 122 individuals to learn more about various topics , such as the phylogeography , genetic diversity , demographic history of the species . The conclusions strongly supported the presence of a longer standing population in the south and a mosaic of Pleistocene refugia in the east . It is believed that today their extinction from these parts could be due to colonization . The similarity of dates obtained from more studies indicates a significant event c . 200 ka , which had brought a great change in the genetic history of the species .

= = Ecology and behavior = =

Common elands are nomadic and crepuscular . They eat in the morning and evening , rest in shade when hot and remain in sunlight when cold . They are commonly found in herds of up to 500 , with individual members remaining in the herd anywhere from several hours to several months . Juveniles and mothers tend to form larger herds , while males may separate into smaller groups or wander individually . During estrus , mainly in the rainy season , groups tend to form more regularly . In southern Africa common elands will often associate with herds of zebras , roan antelopes and oryxes .

Common elands communicate via gestures , vocalizations , scent cues and display behaviors . The flehmen response also occurs , primarily in males in response to contact with female urine or genitals . Females will urinate to indicate fertility during the appropriate phase of their estrous cycle , as well as to indicate their lack of fertility when harassed by males . If eland bulls find any of their predators nearby , they will bark and attempt to attract the attention of others by trotting back and forth until the entire herd is conscious of the danger . Some of their main predators include lions , African wild dogs , cheetahs and spotted hyenas . Juvenile elands are more vulnerable than adults to their predators .

= = Habitat and distribution = =

Common elands live on the open plains of southern Africa and along the foothills of the great southern African plateau . The species extends north into Ethiopia and most arid zones of South Sudan , east into western Angola and Namibia , and south to South Africa . However , there is a low density of elands in Africa due to poaching and human settlement .

Elands prefer to live in semi-arid areas that contain many shrub-like bushes , and often inhabit grasslands , woodlands , sub-desert , bush , and mountaintops with altitudes of about 15,000 ft (4600 m) . Elands do , however , avoid forests , swamps and deserts . The places inhabited by elands generally contain *Acacia* , *Combretum* , *Commiphora* , *Diospyros* , *Grewia* , *Rhus* and *Ziziphus* trees and shrubs ; some of these also serve as their food .

Eland can be found in many National Parks and reserves today , including Nairobi and Tsavo East National Park , Tsavo West National Park , Masai Mara NR , Kenya ; Serengeti , Ruaha and Tarangire National Park , Ngorongoro Crater , Tanzania ; Kagera National Park , Rwanda ; Nyika National Park , Malawi ; Luangwa Valley and Kafue National Park , Zambia ; Hwange National Park

, Matobo National Park , Tuli Safari Area and Chimanimani Eland Sanctuary , Zimbabwe ; Kruger National Park , Kgalagadi Transfrontier Park , Giant 's Castle and Suikerbosrand NR , South Africa .

They live on home ranges that can be 200 ? 400 km² for females and juveniles and 50 km² for males .

= = Diet = =

Common elands are herbivores that browse during drier winter months but have also adapted to grazing during the rainy season when grasses are more common . They require a high @-@ protein diet of succulent leaves from flowering plants but will consume lower quality plant material if available including forbs , trees , shrubs , grasses , seeds and tubers . The eland can conserve water by increasing its body temperature . Grasses the eland eats include *Setaria* and *Themeda* and fruits from *Securinega* and *Strychnos* . Large antelope can survive on lower quality food in times of little rain . Elands feed during the night in hot weather and sleep for long periods during the day .

Most of their water is obtained from their food , though they will drink water when available . As they quickly adjust to the surroundings due to seasonal changes and other causes , they also change their feeding habits . They also use their horns to break off branches that are hard to reach .

= = Sociability and reproduction = =

Females are sexually mature at 15 ? 36 months and males at 4 ? 5 years . Mating may occur anytime after reaching sexual maturity , but is mostly seen in the rainy season . In Zambia , young are born in July and August , while elsewhere it is the mating season . Mating begins when elands gather to feed on lush green plains with plentiful grass , and some males and females start mating with each other in separate pairs . Males chase the females to find out if they are in estrus . They also test the female 's urine . Usually , a female chooses the most dominant and fit male to mate with . Sometimes she runs away from males trying to mate , causing more attraction . This results in fights between males , in which their hard horns are used . It is 2 ? 4 hours before a female allows a male to mount . Males usually keep close contact with females in the mating period . The dominant male can mate with more than one female . Females have a gestation period of 9 months , and give birth to only one calf each time .

Males , females and juveniles each form separate social groups . The male groups are the smallest ; the members stay together and search for food or water sources . The female group is much larger and covers greater areas . They travel the grassy plains in wet periods and prefer bushy areas in dry periods . Females have a complex linear hierarchy . The nursery and juvenile group is naturally formed when females give birth to calves . After about 24 hours of the delivery , the mother and calf join this group . The calves start befriending each other and stay back in the nursery group while the mother returns to the female group . The calves leave the nursery group when they are at least two years old and join a male or female group .

= = Conservation = =

Currently , common elands are not endangered . They are conserved by the U.S. Endangered Species Act , and regulated in international trade by the Convention on International Trade in Endangered Species . Using ground counts and aerial surveys , the International Union for Conservation of Nature (IUCN) calculates the population density of the common eland to be between 0 @. @ 05 and 1 per square kilometre with a total population estimate of 136 @, @ 000 . Populations are considered stable or increasing in the countries of Namibia , Botswana , Zimbabwe , South Africa , Malawi and possibly Tanzania .

The population is , however , gradually decreasing due to habitat loss , caused by expanding human settlements and poaching for its superior meat . As they are docile and inactive most of the time , they can easily be killed . The species became extinct in Swaziland and Zimbabwe , but has been reintroduced .

The IUCN states that about half of the estimated total population lives in protected areas and 30 % on private land . Protected areas that support major populations include Omo (Ethiopia) , Serengeti , Katavi , Ruaha and Selous @-@ Kilombero (Tanzania) , Kafue and North Luangwa (Zambia) , Nyika (Malawi) , Etosha (Namibia) , Kgalagadi Transfrontier Park (Botswana / South Africa) and Ukhahlamba Drakensberg Park (South Africa) . Most of these populations appear to be stable . Relatively large numbers of common eland now live on private land , particularly in Namibia , Zimbabwe and South Africa , reflecting its value as a trophy animal . Common elands have also been widely domesticated in Zimbabwe , South Africa and Kenya , as well as in Russia , Ukraine and England .

= = Uses = =

The common eland is sometimes farmed and hunted for its meat , and in some cases can be better used than cattle because it is more suited to African climates . This has led to some Southern African farmers switching from cattle to eland . Common elands are also pictured as supporters in the coat of arms of Grootfontein , Namibia .

= = = Husbandry = = =

Common elands have a mild temperament and have been successfully domesticated for meat and milk production in South Africa and Russia . Their need for water is quite low because they produce urine with a high @-@ urea content , but they require a substantial grazing area , along with salt licks and large amounts of supplementary foods like maize , sorghum , melons and beans which can be expensive . A female can produce up to 7 kilograms (15 lb) of milk per day that is richer in milkfat than cow milk . The pleasant @-@ tasting milk has a butterfat content of 11 @-@ 17 % and can be stored for up to eight months if properly prepared , versus several days for cow milk .

Housing common elands is difficult due to their ability to jump over fences as high as 3 metres (9 @. @ 8 ft) or simply break through using their substantial mass . Sometimes , wild eland will break through enclosures to mix with domesticated ones . Common elands can reproduce in captivity , but calf survival is low and the young may need to be separated from their mothers to ensure health and adequate feeding . Husbandry requires care because the generally placid animals startle easily and require large amounts of space .