

= Alpine ibex =

The Alpine ibex (*Capra ibex*), also known as the steinbock or bouquetin , is a species of wild goat that lives in the mountains of the European Alps . It is a sexually dimorphic species with larger males who carry larger , curved horns . The coat colour is typically brownish grey . Alpine ibex tend to live in steep , rough terrain above the snow line . They are also social , although adult males and females segregate for most of the year , coming together only to mate . Four distinct groups exist ; adult male groups , female @-@ offspring groups , groups of young individuals , and mixed sex groups .

During the breeding season , males fight for access to females and use their long horns in agonistic behaviours . After being extirpated from most areas by the 19th century , the Alpine ibex was successfully reintroduced to parts of its historical range and all individuals living today descend from the stock in Gran Paradiso National Park in Aosta Valley and from the neighbouring French valley of Maurienne , now part of the Vanoise National Park linked to the former . These two national parks are connected and have been especially created to help the ibex to thrive . The ibex is the emblem of both the Gran Paradiso National Park and the Vanoise National Park . The species is currently listed as of least concern by the IUCN .

= = Taxonomy and phylogeny = =

The Alpine ibex was first described by Carl Linnaeus in 1758 . It is classified in the genus *Capra* (Latin for " goat ") with at least seven other species of wild goat . Both *Capra* and *Ovis* (sheep) descended from a goral @-@ like animal from the Miocene and early Pliocene , whose fossils are found in Kenya , China and Slovenia . The genus *Tossunnoria* appears in China during the late Miocene and appears to have been intermediate between gorals and goats . Fossils of Alpine ibex date back to the late Pleistocene , when it and the Spanish ibex probably evolved from the extinct Pleistocene species *Capra camburgensis* . The Nubian (*C. nubiana*) , Walia (*C. walie*) and Siberian ibex (*C. sibirica*) are sometimes considered to be subspecies of the Alpine ibex , giving populations in the Alps the trinomial of *C. i. ibex* .

= = Appearance = =

Compared with other members of its genus , the Alpine ibex has a short , broad head and a duller coat . It has brownish grey hair over most of the body , a pale abdomen and slightly darker markings on the chin and throat and in a stripe along the back . They moult twice a year , firstly in April or May , and then again in September , when they replace the short summer coat with thicker hair and a woolly undercoat .

Males commonly grow to a height of 90 to 101 centimetres (35 to 40 in) at the withers , with a body length of 149 to 171 centimetres (59 to 67 in) and weigh from 67 to 117 kilograms (148 to 258 lb) . Females are noticeably smaller , with a shoulder height of 73 to 84 centimetres (29 to 33 in) , a body length of 121 to 141 centimetres (48 to 56 in) , and a weight of 17 to 32 kilograms (37 to 71 lb) . Both male and female Alpine ibexes have large , backwards @-@ curving , horns with numerous ridges along their length . At 69 to 98 centimetres (27 to 39 in) , those of the males are substantially larger than those of females , which reach only 18 to 35 centimetres (7 @.@ 1 to 13 @.@ 8 in) in length .

= = Distribution and ecology = =

The Alpine ibex was , at one point , restricted only to the Gran Paradiso National Park in northern Italy , and in the Maurienne Valley in the French Alps but in recent years it was both reintroduced to and recolonised most of the European Alps , and is now found in most of all the Italian and French alpine ranges , southern Germany , Switzerland and Austria . It was also introduced to Bulgaria and Slovenia .

An excellent climber , its preferred habitat is the rocky region along the snow line above alpine forests , where it occupies steep , rough terrain at elevations of 1 @, @ 800 to 3 @, @ 300 metres (5 @, @ 900 to 10 @, @ 800 ft) . Alpine ibex are typically absent from woodland areas although adult males in densely populated areas may stay in larch and mixed larch @-@ spruce woodland if there is no snow . Males spend the winter in coniferous forests . For most of the year , males and females occupy different habitat . Females rely on steep terrain more so than males . Males use lowland meadows during the spring , which is when snow melts and green grass appears . They then climb to alpine meadows during the summer . When winter arrives , both sexes move to steep rocky slopes that amass little snow . They prefer slopes of 30 ? 45 ° and use small caves and overhangs for shelter . Home ranges are highly variable , depending on the availability of resources , and vary in size throughout the year . Figures of anything from 180 to 2 @, @ 800 hectares (0 @. @ 69 to 10 @. @ 81 sq mi ; 1 @. @ 8 to 28 @. @ 0 km²) have been recorded . Home ranges tend to be largest during summer and autumn , smallest in winter and intermediate in spring . Female home ranges are usually smaller than those of males . Alpine ibexes appear to have a low rate of predation and typically die of age , starvation or disease in Gran Paradiso .

= = = Foraging = = =

Alpine ibexes are strictly herbivorous , with over half of their diet consisting of grasses , and the remainder being a mixture of moss , flowers , leaves , and twigs . If leaves and shoots are out of reach , they often stand on their rear legs to reach this food . Grass genera that are the most commonly eaten are *Agrostis* , *Avena* , *Calamagrostis* , *Festuca* , *Phleum* , *Poa* , *Sesleria* and *Trisetum* . The climbing ability of the Alpine ibex is such that it has been observed standing on the sheer face of a dam , where it licks the stonework to obtain mineral salts .

= = Life history = =

Although the Alpine ibex is a social species , they segregate sexually and spatially depending on the season . Four types of groups exist . Adult male groups , female @-@ offspring groups , groups of young individuals 2 ? 3 years old , and mixed sex groups . Young groups are numerous at the beginning of summer but are expelled by females at the end of their gestation period . Female and offspring groups occur year @-@ round , at least in an area of the French Alps . Mixed sex groups of adult males and females occur during breeding , which lasts from December to January . By April and May , the adults separate . The largest aggregations of either sex occur during June and July . Gatherings of males begin to decrease during October and November , and are lowest from the rut from December to March . The males then leave their separate wintering areas and gather again .

There is a linear dominance hierarchy among males . In small populations , which are more cohesive , male ibex know their place in the hierarchy based on memories of past encounters while in mobile and large groups , where encounters with strangers are common , rank is based on horn size . Antagonistic behavior in males can come in the form of " direct " or " indirect " aggression . With direct aggression , one male bumps another with its horns or places itself in front of its opponent . It stands on its hind legs and comes down on his opponent with its horns . This may signal that it is ready to clash or it may be attempting a real clash . Indirect aggression is mostly intimidation displays .

= = = Reproduction and growth = = =

The breeding season starts in December , and typically lasts around six weeks . During this time , male herds break up into smaller groups that search for females . The rut takes place in two phases . In the first phase , the male groups interact with the females who are all in oestrous . The higher the male 's rank , the closer he can get to a female . Males perform courtship displays . In the second phase of the rut , one male separates from his group to follow an individual female . He displays to her and guards her from other males . Before copulation , the female moves her tail and

courtship becomes more intensive . They copulate and then he rejoins his group and reverts to the first phase . Gestation lasts around 167 days , and results in the birth of one or two kids , with twins making up about 20 % of births .

Alpine ibex reach sexual maturity at eighteen months , but females do not reach their maximum body size for five to six years , and males not for nine to eleven years . The horns grow throughout life , growing most rapidly during the second year of life , and thereafter by about 8 centimetres (3 @. @ 1 in) a year , eventually slowing to half that rate once the animal reaches ten years of age . Alpine ibex live for up to nineteen years in the wild .

= = Conservation status = =

The Alpine ibex historically ranged through France , Italy , Switzerland , Liechtenstein , Bavaria , Austria and Slovenia . Starting in the early 1500s and with firearms becoming common , the overall population declined due to overexploitation and poaching . The ibex became extinct in Switzerland and Germany by the 18th century , and was extinct in Austria and northeastern Italy by the 19th century . They remained only in and around the adjacent Gran Paradiso and Vanoise Massifs , then both part of the Kingdom of Piedmont . Located in the western Italian Alps and the Maurienne valley in the north eastern French alps , bordering the Vanoise and Gran Paradiso Massif , the park was declared a royal hunting reserve in 1854 by Vittorio Emanuele II .

Ibex were protected from poaching and their numbers increased , reaching 3 @, @ 020 in 1914 . The ibex enjoyed further protection when Gran Paradiso was made into a national park in 1922 . Animals from this stock both drifted naturally and were introduced to other areas . By 1976 , the number of populations of ibex numbered 104 . Today , the total population of Alpine ibex is over 20 @, @ 000 and is considered to be of Least Concern by the IUCN . However , introduced populations of ibex appear to have low genetic diversity .