


APPROVED FOR SPECIES PROTECTION

TEXT: KLAUS JACOB

For centuries, their lives were under threat: Europeans considered bears, wolves and ibexes either as a threat, a food source or trophies, and hunted them to extinction. Wilko Graf von Hardenberg, a researcher at the Max Planck Institute for the History of Science in Berlin, studies the ways in which our relationship to iconic mammals has changed over the centuries.

KNOWLEDGE FROM

ENVIRONMENT & CLIMATE

A photograph of three Alpine ibex on a dark, mossy rock. One ibex is standing on its hind legs in the center, facing left. Another ibex is lying down behind it, also facing left. A third ibex is standing in the foreground on the right, facing left. The background is a blurred, blueish-grey mountain landscape.

Back on top: following an eventful history, during the course of which Alpine ibexes were sometimes found exclusively in the Gran Paradiso region and even there were only a few hundred specimens, there are now large numbers living in the Italian national park and throughout the entire Alps.

For the first time in more than 170 years, a brown bear came wandering through Bavaria in the summer of 2006, having made its way from Italy to Germany via Austria. Bruno, as he was dubbed, soon became the talk of the town and became a popular topic in press reports. He was even featured in a report in the New York Times. True to his nature, he would prey on sheep and goats and plunder beehives. He soon became a “problem bear” as he began to venture close to residential areas, and caused general merriment when the then Prime Minister of Bavaria, Edmund Stoiber, used the term in a clumsy manner. He was shot dead on June 26, 2006, following weeks of unsuccessful attempts to capture him. The manner in which the 110 kilogram animal was dealt with serves as a good example of the problems associated with human-predator coexistence: no sooner had the intruder crossed into Germany than two implacably opposed factions formed. On the one side were the nature conservationists, who argued that bears

are part of the original Bavarian ecosystem and that they should once again be accepted as the uppermost link of the food chain. On the other side stood the livestock farmers, who were concerned for their herds, as well as members of the public anxious about having to coexist with a predator and who were only too happy to talk in terms of “the problem bear.” Following the fatal shot, emotions boiled over among both parties: there were lawsuits and even death threats.

The history of iconic animals

In the case of wolves, which are once again roaming free in some areas of Germany, there is a similar dispute involving conservation on the one hand and the safety of people and property on the other. And such disputes are not new: for many years, environmental historian Wilko Graf von Hardenberg of the Max Planck

Institute for the History of Science in Berlin has been looking into how humans deal with iconic animals. In the current context, the word “iconic” refers to animals that have a special meaning for humans. Traditionally, these mainly include the large predators, such as bears and wolves, whose great strength impresses us and which are depicted as heraldic animals on flags and coins. The eagle too belongs in this group. Yet there are also harmless herbivores, such as the ibex, that have been elevated due to their majestic appearance, as well as their importance for hunting. The ibex is depicted in the coats of arms of numerous Swiss cantons. “An irony of history,” says Hardenberg: “of all the heraldic animals there are, this one became extinct in Switzerland for about a century.” The last one was shot there in the first half of the 19th century and the species wasn’t reintroduced until 1920.

Large animals need extensive ranges to survive; in the case of brown bears this is between 100 and 300 square kilometers for females and males respectively, and about half as much for wolves. More often than not, even national parks are too small, as many animals travel long distances. Young wolves and bears will travel hundreds of kilometers in search of new territories. Thus, people have always had to come to some arrangement with the large predators. Until the end of the 19th century, the arrangement was very one-sided: bears and wolves were hunted mercilessly in the Middle Ages and for a long time afterwards, and the hunters were often even paid a bounty. These predators were demonized, which is still evident in many fairy tales, for example when the wolf eats Little Red Riding Hood. The brown bear had already disappeared from the British Isles about 1000 years ago, and it became extinct in Northern Germany towards the end of the 18th century. It was able to survive for another 50 years in Bavaria, but another 100 years later, after the Second World War, all that remained in the Alpine region were a few isolated colonies in Italy and Slovenia.

The final tally-ho: Vittorio invited Emanuele III to the royal ibex hunt in the Gran Paradiso area, which he owned, for the final time in 1913. He ceded the region to the state six years later, under the condition that a nature park for the protection of animals and plants be established there.

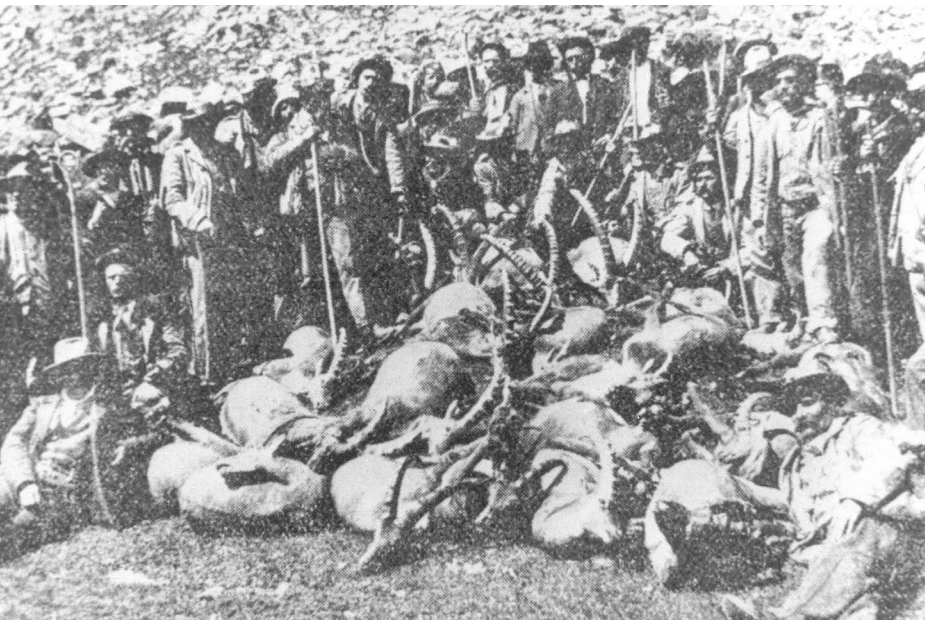
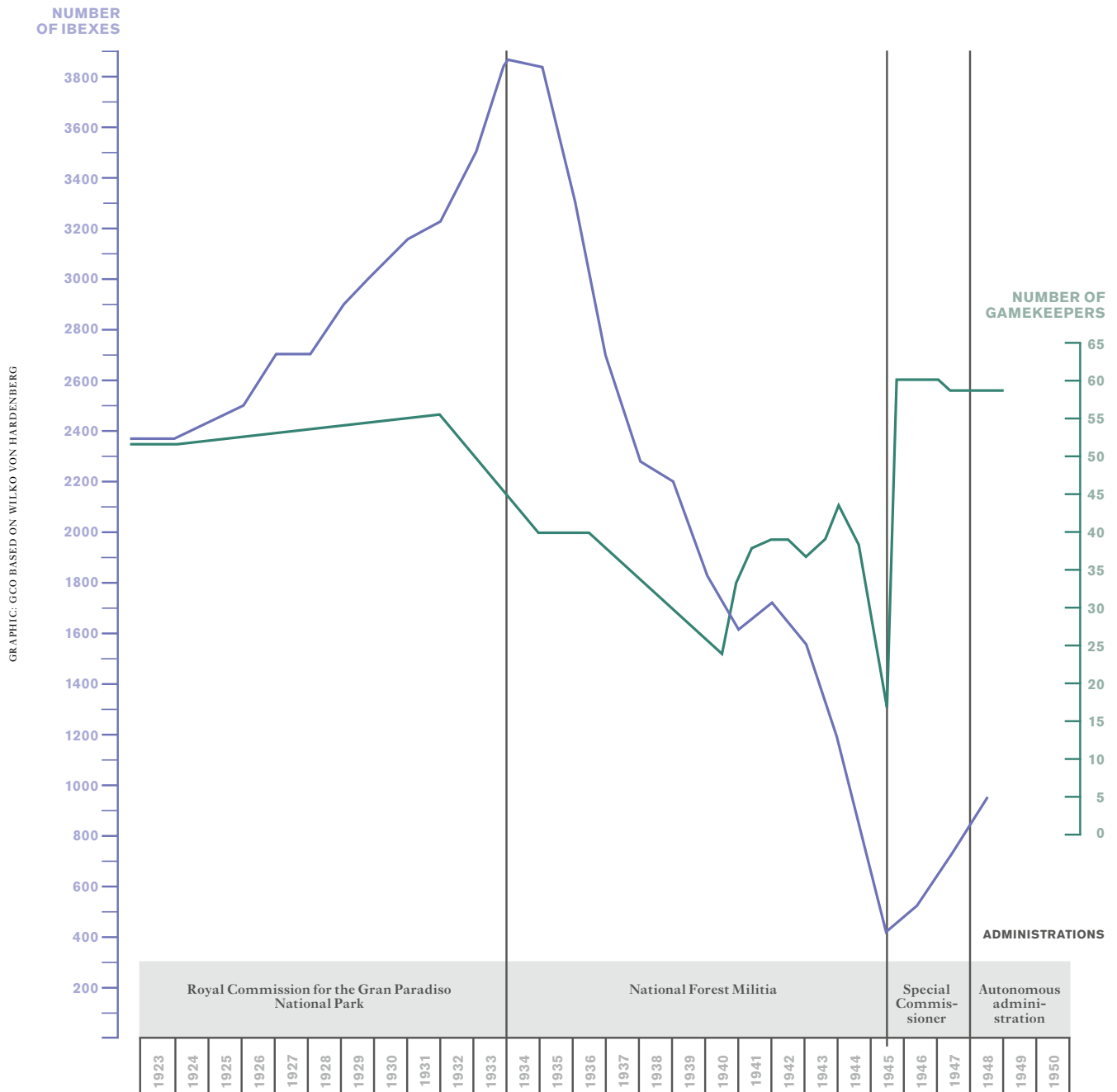


PHOTO: PNGP (PARCO NAZIONALE GRAN PARADISO)



The significant effects of centralization: the number of ibexes in the Gran Paradiso National Park was not always determined reliably between 1923 and 1947, partly because the park administration changed their survey method during that period. However, the statistics reveal the trends, the most obvious of which is that when the supervision of the park was entrusted to the National Forestry Militia by the fascist regime and extra-regional militiamen were brought into the region, the ibex population shrank dramatically. It only recovered after the end of this era.

Had not a new way of thinking taken root in politics and society in the early 20th century when nature conservation began to gain in importance, bears and other iconic animals would probably have become completely extinct throughout Western

Europe. The idea was to protect animals rather than hunt them. Hardenberg suspects that this change in thinking was the result of industrialization, as more and more people started living in cities and lost touch with untamed nature.

This enabled a romantic image to take hold, in which even large predators had their place. But this was not a straightforward development and it depended upon many factors. Each region had its own traditions, economic structures and political bias.



So one has to look very closely at the detail to understand how the relationship between humans and large mammals has changed over time.

This is what Hardenberg has done. He conducted research into the management of the ibex in the Italian Gran Paradiso massif region between the two world wars. The results, from two years spent searching the archives, will be published by the University of Pittsburgh Press in 2021 in a book entitled *A Monastery for the Ibex*. The book tells the story of how the Gran Paradiso area ensured the survival of the Alpine ibex (*Capra ibex*). The high alpine region north of Turin became the final refuge for the species during the 20th century. Like the brown bear, it had become almost extinct in the Alps and only survived there. All living members of the species descend from this bio-reservoir. The fact that the ibex did not vanish completely is down to the intervention of the authorities. King Carlo Felice banned the hunting of these rare animals as early as 1821, and King Vittorio Emanuele II established a royal hunting reserve around 30 years later and had it guarded by a dedicated corps of guards. Ultimately, this became the forerunner of the Gran Paradiso National Park, which was established in 1922, shortly after the First World War.

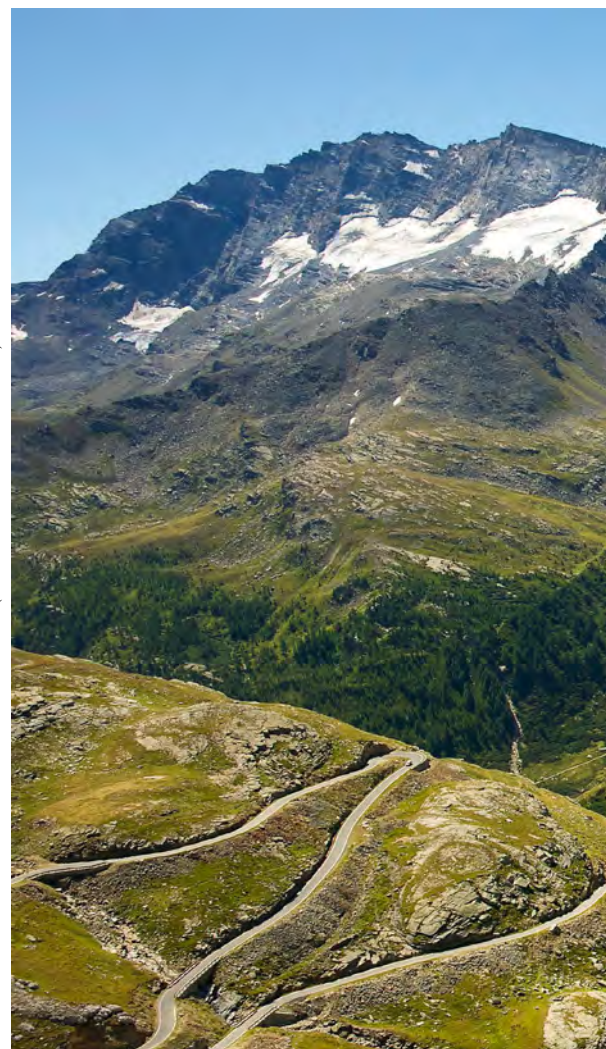
Thanks to the protection this provided, the number of ibexes increased from 2370 in 1922 to 3865 in 1933. But then the development toppled in the opposite direction and the population fell dramatically. Whilst 1564 animals had been recorded in 1942, this number had fallen to just 419 towards the end of the Second World War. The cause was quickly identified: poachers had almost wiped out the population for cheap meat. The fact that they were able to go about their business undisturbed can be explained by the prevailing political situation: following Mussolini's rise to power, the fascists intervened in the park administration in 1933. Their goal was to

present Italy as the final refuge for the species, and their propaganda emphasized the extent to which the fascist regime was committed to the protection of Italy's natural environment. However, this failed entirely. The fascists established a dedicated forestry police force, the *Milizia Nazionale Forestale*, which was recruited from all parts of Italy. Prior to that, the gamekeepers had been recruited from the local area. The outsiders were neither familiar with the nature of the region nor with its game passes and secret trails, nor with the peculiarities of the local population. Because many of the militias had been posted to this remote region as a punishment for disciplinary violations, their motivation levels were very low. Their ignorance also made it easy for locals to outwit them. The story is told of one gamekeeper who courted a local woman whose two brothers were well-known poachers, so she was always able to tell them well in advance which routes the various patrols would take. The brothers hunted the ibexes unchallenged and even processed the meat in their own restaurants.

**Whilst ibexes
are currently
protected, this is not
always the case
for bears and wolves**

But was poaching really the only thing responsible for the sharp decline in the ibex population? There are other conceivable reasons, such as particularly harsh winters, frequent avalanches, epidemics and having to compete with chamois for food. And there were indeed some extremely severe winters at that time. However, Hardenberg wanted to know precisely what happened, so he applied modern biostatistical methods to the historical data. He made use of a computer model developed by a research team led by climatologist Andrew Jacobson of

PHOTO: PNGP (PARCO NAZIONALE GRAN PARADISO)



Princeton University in New Jersey. The researchers had developed it in 2004 to determine the extent to which the ibex population depended on climate in precisely this Alpine region. Although the period in question was 1956 to 2000, theoretically the model should also work for earlier years. Hardenberg applied it to the interwar years and the results were clear: by no means can the prevailing weather conditions explain the decline in the ibex population after 1933. Outbreaks of disease and avalanches can also be ruled out, as the park administration would have



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Protection for fauna and flora: the Gran Paradiso National Park is about the size of Hamburg. Today, it not only provides a haven for plants and ibexes, but also for wolves. Bearded vultures have also been returning since the 2000s – for the first time ever in the Western Alps.

documented such events. The only remaining cause, therefore, was indeed poaching.

The ibex is no longer endangered in the Alps, where approximately 45,000 animals are currently thriving, of which about 13,000 are in Italy and over 17,000 in Switzerland. There are even a few hundred ibexes climbing around the German Alps, and their numbers appear to be increasing. Whilst the conservation and reintroduction of the ibex is currently supported by all sides and probably owes a large part of its suc-

cess to this fact, the situation is more complicated when it comes to the large predators that can get into conflict with humans. Protecting bears, wolves or lynxes, for example, is always associated with a considerable amount of conflict. In the book *The Nature State*, which was published by Routledge in 2017 and which he co-edited, Hardenberg describes how the coexistence of man and bear has developed in Trentino. Ultimately, the story of the problem bear Bruno is also a result of this history. It all started when brown bears became ex-

tremely rare in the Alps during the 19th century as a result of several factors: on the one hand, the animals were hunted with a vengeance right up to the first third of the 20th century because they preyed on goats and sheep. Most of the inhabitants of the Alps still lived from agriculture at that time, so they had reason to fear predators.

On the other hand, the Alpine landscape underwent a radical change: forests were cleared, Alpine pastures were established, new settlements were constructed, tourism



flourished, roads and railways were laid through remote valleys, and industrial enterprises settled there. Bears, which need large ranges, found ever fewer refuges. They were no longer able to move from their summer pastures to their wintering grounds without crossing traffic routes or coming close to buildings. Even in the course of their usual forays they always came across human encroachment. Ultimately, the bears were forced to coexist with civilization; rather than avoiding people, as is their natural tendency, they accepted our proximity. The result, according to Hardenberg, was that: “The number of conflicts between humans and bears rose sharply.” Claiming self-defense, people would reach for their guns wherever bears appeared.



PHOTO: DPA – REPORT (NEUE ZEITUNG FOR TIROL/ MANFRED SPRENGER DPA)

Ventured too close to humans: because unlike many of his species, Bruno the bear did not remain in remote regions of the Alps, he became a “problem” in Bavaria and was shot on June 26, 2006.

Attitudes towards the brown bear began to change at the start of the 20th century, not least because more people were beginning to adopt a romantic view of nature and no longer simply regarded predators as enemies. Many intellectuals and politicians at that time began to believe that the existence of bears was endangered and demanded protective measures. But the killing continued. Decades passed before a protected area was finally opened in the Adamello-Brenta region. The fascists, of all people, then stood up for the endangered species – again for propaganda purposes.

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In 1936, the Italian Ministry of Agriculture and Forestry prohibited the hunting and capture of bears, enacting the first total ban on bear hunting anywhere in the world. However, because there were no gamekeepers and the local population was not supportive, not much changed. Many claimed that not only were farm animals in danger, but also children. Even state compensation for the damage caused could not prevent the trend, though the farmers were happy to take the money. Hardenberg unearthed an incident that took place in September 1954 involving a missing cow. The farmer demanded compensation, claiming that a bear had killed his cow, which

however, had just escaped and later reappeared. The bear was innocent.

By the mid-1990s, there were only three bears remaining in the Adamello-Brenta Nature Park – too few to maintain a breeding population. This critical situation finally mobilized the state. To avoid having to abandon this highly symbolic animal and under the auspices of an EU project, the park administration brought in bears from Slovenia, where there are still large populations. The operation was launched on May 26, 1999. A truck struggled up a narrow mountain road in the Tovel valley with a male brown bear from Slovenia in its trailer. Nine additional transports were to follow in the following years, and the population eventually recovered.

Among the imported animals were the parents of “problem bear” Bruno. Joze, the father, was rehomed in Trentino on May 22, 2000, followed by the mother, Jurka, on May 3, 2001. Bruno, a dyed-in-the-wool Italian, was born in 2004. However, none of the family was particularly lucky, which probably has to do with the



PHOTO: BETTINA AUSSERHOFER

idiosyncrasies of the mother. She never behaved aggressively towards humans, but did venture close to villages where she broke into stables and plundered beehives. Basically, she had adapted very well to the dense human settlement in the Alps. Because people refused to accept this, Jurka was captured in 2010 and moved to the “Black Forest Alternative Wolf and Bear Park.” Her offspring, who had all learned from her example, fared worse. Not only Bruno was shot, but also his younger brother, who had strayed into Switzerland, where he would rummage through dumpsters.

Bears only tend to come to Germany en route from other countries, whereas

wolves have once again taken up permanent residence here after almost 150 years. “From a human perspective, wolves are more dangerous than bears,” Hardenberg explains. This is because, whereas bears are predominantly herbivorous, wolves are primarily carnivorous. 60 packs, 6 pairs and 6 individuals have found a home here since 1998. The Federal Documentation and Consultation Centre on Wolves (DBBW) keeps meticulous records of this. Discussions about this lupine immigrant are similar to the dispute about bears in Italy. Hunters and livestock farmers would prefer to shoot the wolves. And anxious urbanites would also like to forgo the slight sensation of fear when hiking through the countryside.

On the other side are the conservationists, such as the Nature and Biodiversity Conservation Union (NABU), who have proclaimed a National Wolf Day and are calling for donations. As Hardenberg has demonstrated in his work on other iconic mammals, whether the wolf will be able to survive long-term is no longer a matter of nature: “It’s a political decision,” the researcher explains. This is because man interferes with the environment and species diversity to a profound extent and ultimately determines wildlife populations, species composition and even the vegetation. Today, the notion of an untamed, pristine natural environment is reserved for romantics.

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On the trail of animals and humans: Wilko Graf von Hardenberg carries out research into how our relationship with large mammals has changed over time.

SUMMARY

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Humans have hunted bears, wolves, lynxes and ibexes ruthlessly for centuries, until these large mammals were only found in a few remote areas.

Many people’s attitude towards these iconic mammals has changed since the early 20th century, but there have been multiple setbacks in terms of protecting them.

Using the ibex population in the Italian Gran Paradiso massif as an example, Wilko Graf von Hardenberg has reconstructed the eventful history of efforts to protect it. He also used computational modeling to demonstrate that it was hunting, rather than climatic factors that thwarted efforts to protect the animals between the First and Second World Wars.

Man’s relationship with bears and wolves continues to be marked by the conflicting interests of conservationists on the one hand and cattle farmers and the concerned public on the other.