

Hunting

From Wikipedia, the free encyclopedia

Hunting is the practice of killing or trapping animals, or pursuing or tracking them with the intent of doing so. Hunting wildlife or feral animals is most commonly done by humans for food, recreation, to remove predators that are dangerous to humans or domestic animals, or for trade. Lawful hunting is distinguished from poaching, which is the illegal killing, trapping or capture of the hunted species. The species that are hunted are referred to as game or prey and are usually mammals and birds.

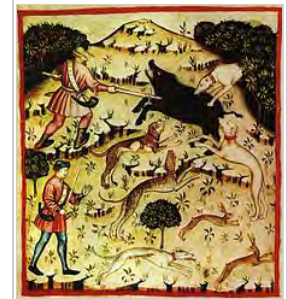
Hunting can also be a means of pest control. Hunting advocates state that hunting can be a necessary component^[1] of modern wildlife management, for example, to help maintain a population of healthy animals within an environment's ecological carrying capacity when natural checks such as predators are absent or very rare.^[2] However, hunting has also heavily contributed to the endangerment, extirpation and extinction of many animals.^[3]

The pursuit, capture and release, or capture for food of fish is called fishing, which is not commonly categorised as a form of hunting. It is also not considered hunting to pursue animals without intent to kill them, as in wildlife photography, birdwatching, or scientific research activities which involve tranquilizing and/or tagging of animals or birds. The practice of foraging or gathering materials from plants and mushrooms is also considered separate from hunting.

Skillful tracking and acquisition of an elusive target has caused the word *hunt* to be used in the vernacular as a metaphor, as in treasure hunting, "bargain hunting", and even "hunting down corruption and waste".

Contents

- 1 Etymology
- 2 History
 - 2.1 Paleolithic
 - 2.2 Antiquity
 - 2.3 Pastoral and agricultural societies
 - 2.4 Use of dogs
- 3 Religion
 - 3.1 Indian and Eastern religions
 - 3.2 Christianity, Judaism, and Islam
- 4 National traditions
 - 4.1 New Zealand
 - 4.2 *Shikar* (Indian subcontinent)
 - 4.3 Safari
 - 4.4 United Kingdom
 - 4.5 United States
 - 4.6 Russia
 - 4.7 Australia
 - 4.8 Japan
 - 4.9 Trinidad and Tobago
- 5 Wildlife management
 - 5.1 Bag limits
 - 5.2 Closed and open season
 - 5.3 Laws
- 6 Methods
- 7 Trophy hunting
 - 7.1 History
 - 7.2 Conservation tool



Boar hunting, Tacuinum Sanitatis (a medieval handbook on health and wellbeing; 14th century)



Mughal aristocrats hunting a blackbuck alongside an Asiatic cheetah



A 19th-century Maratha hunting party from India

- 7.3 Controversy
- 8 Economics
- 9 Environmental problems
- 10 Conservation
 - 10.1 Legislation
 - 10.2 Species
 - 10.3 Studies
- 11 See also
- 12 References
- 13 Further reading
- 14 External links

Etymology

The word "*hunt*" serves as both a noun ("to be on a hunt") and a verb. The noun has been dated to the early 12th century, "act of chasing game," from the verb *hunt*. Old English had *huntung*, *huntop*. The meaning of "a body of persons associated for the purpose of hunting with a pack of hounds" is first recorded in the 1570s. Meaning "the act of searching for someone or something" is from about 1600.

The verb, Old English *huntian* "to chase game" (transitive and intransitive), perhaps developed from *hunta* "hunter," is related to *hentan* "to seize," from Proto-Germanic *huntojan* (the source also of Gothic *hinþan* "to seize, capture," Old High German *hunda* "booty"), which is of uncertain origin. The general sense of "search diligently" (for anything) is first recorded c. 1200.^[4]

History

Paleolithic

Hunting has a long history and may well pre-date the rise of the species *Homo sapiens*. While our earliest Hominid ancestors were probably frugivores or omnivores, there is evidence that earlier *Homo* species,^{[5][6]} and possibly also australopithecine^[7] species, utilised larger animals for subsistence. Evidence from western Kenya suggests that hunting has been occurring for more than two million years.^[8]



Saharan rock art

Furthermore, evidence exists that hunting may have been one of the multiple environmental factors leading to extinctions of the holocene megafauna and their replacement by smaller herbivores.^[9]

North American megafauna extinction was coincidental with the Younger Dryas impact event, possibly making hunting a less critical factor in prehistoric species loss than had been previously thought.^[10] However, in other locations such as Australia, humans are thought to have played a very significant role in the extinction of the Australian megafauna that was widespread prior to human occupation.^{[11][12]}



Inuit walrus hunters

The closest surviving relatives of the human species are the two species of *Pan*: the common chimpanzee (*Pan troglodytes*) and bonobos (*Pan paniscus*). Common chimpanzees have an omnivorous diet that includes troop hunting behaviour based on beta males being led by an alpha male. Bonobos have also been observed to occasionally engage in group hunting,^[13] but eat a mostly frugivorous diet.^[14]

While it is undisputed that early humans were hunters, the importance of this for the emergence of the *Homo* genus from the earlier Australopithecines, including the production of stone tools and eventually the control of fire, are emphasised in the hunting hypothesis and de-emphasised in scenarios that stress omnivory and social interaction, including mating behaviour, as essential in the emergence of human behavioural modernity. With the establishment of language, culture, and religion, hunting became a theme of stories and myths, as well as rituals such as dance and animal sacrifice.

Archaeological evidence found in present-day Germany documents that wooden spears have been used for hunting since at least 400,000 years ago,^[15] and a 2012 study suggests that *Homo heidelbergensis* may have developed the technology about 500,000 years ago.^[16] Wood does not preserve well, however, and Craig Stanford, a primatologist and professor of anthropology at the University of Southern California, has suggested that the discovery of spear use by chimpanzees probably means that early humans used wooden spears as well, perhaps, five million years ago.^[17]

Hunting was a crucial component of hunter-gatherer societies before the domestication of livestock and the dawn of agriculture, beginning about 11,000 years ago. By the Mesolithic, hunting strategies had diversified with the development of the bow 18,000 years ago and the domestication of the dog about 15,000 years ago. Evidence puts the earliest known mammoth hunting in Asia with spears to approximately 16,200 years ago.^[18]

Many species of animals have been hunted throughout history. It has been suggested that in North America and Eurasia, caribou and wild reindeer "may well be the species of single greatest importance in the entire anthropological literature on hunting"^[19] (see also Reindeer Age), although the varying importance of different species would depend on the geographic location.

Hunter-gathering lifestyles remained prevalent in some parts of the New World, Sub-Saharan Africa, and Siberia, as well as all of Australia, until the European Age of Discovery. They still persist in some tribal societies, albeit in rapid decline. Peoples that preserved paleolithic hunting-gathering until the recent past include some indigenous peoples of the Amazonas (Aché), some Central and Southern African (San people), some peoples of New Guinea (Fayu), the Mlabri of Thailand and Laos, the Vedda people of Sri Lanka, and a handful of uncontacted peoples. In Africa, one of the last remaining hunter-gatherer tribes are the Hadza of Tanzania.^[20]

Criticism

Archaeologist Louis Binford criticised the idea that early hominids and early humans were hunters. On the basis of the analysis of the skeletal remains of the consumed animals, he concluded that hominids and early humans were mostly scavengers, not hunters,^[21] and this idea is popular among some archaeologists and paleoanthropologists. Robert Blumenshine proposed the idea of *confrontational scavenging*,^[22] which involves challenging and scaring off other predators *after* they have made a kill, which he suggests could have been the leading method of obtaining protein-rich meat by early humans.

Antiquity

Even as animal domestication became relatively widespread and after the development of agriculture, hunting was usually a significant contributor to the human food supply. The supplementary meat and materials from hunting included protein, bone for implements, sinew for cordage, fur, feathers, rawhide and leather used in clothing. Man's earliest hunting weapons would have included rocks, spears, the atlatl, and bows and arrows. Hunting is still vital in marginal climates, especially those unsuited for pastoral uses or agriculture. For example, Inuit people in the Arctic trap and hunt animals for clothing and use the skins of sea mammals to make kayaks, clothing, and footwear.

On ancient reliefs, especially from Mesopotamia, kings are often depicted as hunters of big game such as lions and are often portrayed hunting from a war chariot. The cultural and psychological importance of hunting in ancient societies is represented by deities such as the horned god Cernunnos and lunar goddesses of classical antiquity, the Greek Artemis or Roman Diana. Taboos are often related to hunting, and mythological association of prey species with a divinity could be reflected in hunting restrictions such as a reserve surrounding a temple. Euripides' tale of Artemis and Actaeon, for example, may be seen as a caution against disrespect of prey or impudent boasting.

With the domestication of the dog, birds of prey, and the ferret, various forms of animal-aided hunting developed, including ventry (scent hound hunting, such as fox hunting), coursing (sight hound hunting), falconry, and ferreting. While these are all associated with medieval hunting, over time, various dog breeds were selected for very precise tasks during the hunt, reflected in such names as pointer and setter.



Moche deer hunting scene, Larco Museum Collection, Lima, Peru



Ancient Greek black-figure pottery depicting the return of a hunter and his dog; made in Athens between 550–530 BCE, found in Rhodes



Artemis with a Hind, a Roman copy of an Ancient Greek sculpture, c. 325 BC, by Leochares



An example of a Goguryeo tomb mural of hunting

Pastoral and agricultural societies

Even as agriculture and animal husbandry became more prevalent, hunting often remained as a part of human culture where the environment and social conditions allowed. Hunter-gatherer societies persisted, even when increasingly confined to marginal areas. And within agricultural systems, hunting served to kill animals that prey upon domestic and wild animals or to attempt to extirpate animals seen by humans as competition for resources such as water or forage.

When hunting moved from a subsistence activity to a social one, two trends emerged:

1. the development of the role of the specialist hunter, with special training and equipment
2. the co-option of hunting as a "sport" for those of an upper social class

The meaning of the word *game* in Middle English evolved to include an animal which is hunted. As game became more of a luxury than a necessity, the stylised pursuit of it also became a luxury. Dangerous hunting, such as for lions or wild boars, often done on horseback or from a chariot, had a function similar to tournaments and many sports. Hunting ranked as an honourable, somewhat competitive pastime to help the aristocracy practice skills of war in times of peace.^[23]

In most parts of medieval Europe, the upper class obtained the sole rights to hunt in certain areas of a feudal territory. Game in these areas was used as a source of food and furs, often provided via professional huntsmen, but it was also expected to provide a form of recreation for the aristocracy. The importance of this proprietary view of game can be seen in the Robin Hood legends, in which one of the primary charges against the outlaws is that they "hunt the King's deer". In contrast, settlers in Anglophone colonies gloried democratically in hunting for all.^[24]

In Medieval Europe, hunting was considered by Johannes Scotus Eriugena to be part of the set of *seven mechanical arts*.^[25]

Use of dogs

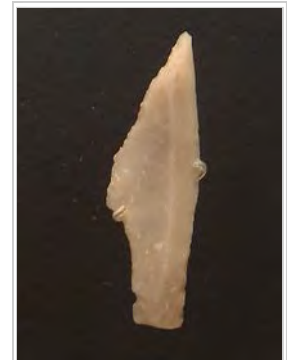
Although various other animals have been used to aid the hunter, such as ferrets, the dog has assumed many very important uses to the hunter. The domestication of the dog has led to a symbiotic relationship in which the dog's independence from humans is deferred. Though dogs can survive independently of humans, and in many cases do, as with feral dogs, where hunger is not a primary factor, the species tends to defer to human control in exchange for habitation, food and support.

Dogs today are used to find, chase, retrieve, and sometimes to kill the game. Hunting dogs allow humans to pursue and kill prey that would otherwise be very difficult or dangerous to hunt. Different breeds of dogs are used for different types of hunting. Waterfowl are commonly hunted using retrieving dogs such as the Labrador Retriever, the Golden Retriever, the Chesapeake Bay Retriever, the Brittany Spaniel, and other similar breeds. Game birds are flushed out using flushing spaniels such as the English Springer Spaniel, the various Cocker Spaniels and similar breeds.

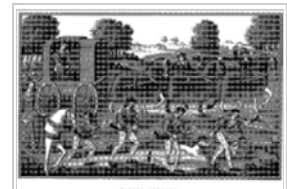
The hunting of wild mammals in England and Wales with dogs was banned under the Hunting Act 2004. The wild mammals include fox, hare, deer and mink. Hunting with dogs is permissible, however, where it has been carried out in accordance with one of the exceptions in the Act.^[26]

Religion

Many prehistoric deities are depicted as predators or prey of humans, often in a zoomorphic form, perhaps alluding to the importance of hunting for most Palaeolithic cultures.



Sharp flint piece from Bjerlev Hede in central Jutland. Dated around 12,500 BC and considered the oldest hunting tool from Denmark



Ladies hunting in the 15th century



Tapestry with a hunting scene showing the coat of arms of Dymitr Chalecki, 16th century

In many pagan religions, specific rituals are conducted before or after a hunt; the rituals done may vary according to the species hunted or the season the hunt is taking place. Often a hunting ground, or the hunt for one or more species, was reserved or prohibited in the context of a temple cult.

Indian and Eastern religions

Hindu scriptures describe hunting as an acceptable occupation, as well as a sport of the kingly. Even figures considered godly are described to have engaged in hunting. One of the names of the god Shiva is Mrigavyadha, which translates as "the deer hunter" (*mriga* means deer; *vyadha* means hunter). The word *Mriga*, in many Indian languages including Malayalam, not only stands for deer, but for all animals and animal instincts (Mriga Thrishna). Shiva, as Mrigavyadha, is the one who destroys the animal instincts in human beings. In the epic Ramayana, Dasharatha, the father of Rama, is said to have the ability to hunt in the dark. During one of his hunting expeditions, he accidentally killed Shravana, mistaking him for game. During Rama's exile in the forest, Ravana kidnapped his wife, Sita, from their hut, while Rama was asked by Sita to capture a golden deer, and his brother Lakshman went after him. According to the Mahabharat, Pandu, the father of the Pandavas, accidentally killed the sage Kindama and his wife with an arrow, mistaking them for a deer. Krishna is said to have died after being accidentally wounded by an arrow of a hunter.

Jainism teaches followers to have tremendous respect for all of life. Prohibitions for hunting and meat eating are the fundamental conditions for being a Jain.

Buddhism's first precept is the respect for all sentient life. The general approach by all Buddhists is to avoid killing any living animals. Buddha explained the issue by saying "all fear death; comparing others with oneself, one should neither kill nor cause to kill."

Christianity, Judaism, and Islam

From early Christian times, hunting has been forbidden to Roman Catholic Church clerics. Thus the *Corpus Juris Canonici* (C. ii, X, De cleric. venat.) says, "We forbid to all servants of God hunting and expeditions through the woods with hounds; and we also forbid them to keep hawks or falcons." The Fourth Council of the Lateran, held under Pope Innocent III, decreed (canon xv): "We interdict hunting or hawking to all clerics." The decree of the Council of Trent is worded more mildly: "Let clerics abstain from illicit hunting and hawking" (Sess. XXIV, De reform., c. xii), which seems to imply that not all hunting is illicit, and canonists generally make a distinction declaring noisy (*clamorosa*) hunting unlawful, but not quiet (*quieta*) hunting.

Ferraris (s.v. "Clericus", art. 6) gives it as the general sense of canonists that hunting is allowed to clerics if it be indulged in rarely and for sufficient cause, as necessity, utility or "honest" recreation, and with that moderation which is becoming to the ecclesiastical state. Ziegler, however (De episc., l. IV, c. xix), thinks that the interpretation of the canonists is not in accordance with the letter or spirit of the laws of the church.

Nevertheless, although a distinction between lawful and unlawful hunting is undoubtedly permissible, it is certain that a bishop can absolutely prohibit all hunting to the clerics of his diocese, as was done by synods at Milan, Avignon, Liège, Cologne, and elsewhere. Benedict XIV (De synodo diocesis., l. II, c. x) declared that such synodal decrees are not too severe, as an absolute prohibition of hunting is more conformable to the ecclesiastical law. In practice, therefore, the synodal statutes of various localities must be consulted to discover whether they allow quiet hunting or prohibit it altogether.

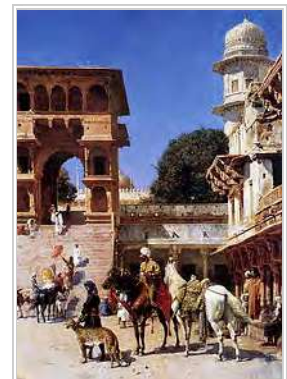
It is important to note that most Christian, do not observe kosher dietary laws hence most Christian have no religious restrictions on eating the animals hunted. This is in accord with what is found in the Acts of the Apostles 15:28–29, and 1 Timothy 4:4.



Albert Gleizes, 1911, *La Chasse (The Hunt)*, oil on canvas depicting a scene in the Cubist style of hunting by horseback in France



Hunting Companions, Dutch 19th-century painting featuring two dogs, a shotgun and a game bag



Weeks Edwin's painting *Departure for the Hunt*



A tiger hunt at Jhajjar, Rohtak District, Panjab

In Jewish law hunting is not forbidden although there is an aversion to it. The great 18th-century authority Rabbi Yechezkel Landau after a study concluded although "hunting would not be considered cruelty to animals insofar as the animal is generally killed quickly and not tortured... There is an unseemly element in it, namely cruelty." The other issue is that hunting can be dangerous and Judaism places an extreme emphasis on the value of human life.^{[27][28]}

Islamic Sharia Law permits hunting of lawful animals and birds if they cannot be easily caught and slaughtered.^[29]

National traditions

New Zealand

New Zealand has a strong hunting culture. The islands making up New Zealand originally had no land mammals apart from bats. However, once Europeans arrived, game animals were introduced by acclimatisation societies to provide New Zealanders with sport and a hunting resource. Deer, pigs, goats, rabbits, hare, tahr and chamois all adapted well to the New Zealand terrain, and with no natural predators, their population exploded. Government agencies view the animals as pests due to their effects on the natural environment and on agricultural production, but hunters view them as a resource.

Shikar (Indian subcontinent)

During the feudal and colonial times in British India, hunting was regarded as a regal sport in the numerous princely states, as many maharajas and nawabs, as well as British officers, maintained a whole corps of *shikaris* (big-game hunters), who were native professional hunters. They would be headed by a master of the hunt, who might be styled *mir-shikar*. Often, they recruited the normally low-ranking local tribes because of their traditional knowledge of the environment and hunting techniques. Big game, such as Bengal tigers, might be hunted from the back of an elephant.

Regional social norms are generally antagonistic to hunting, while a few sects, such as the Bishnoi, lay special emphasis on the conservation of particular species, such as the antelope. India's Wildlife Protection Act of 1972 bans the killing of all wild animals. However, the Chief Wildlife Warden may, if satisfied that any wild animal from a specified list has become dangerous to human life, or is so disabled or diseased as to be beyond recovery, permit any person to hunt such an animal. In this case, the body of any wild animal killed or wounded becomes government property.^[30]

Safari

A safari, from a Swahili word meaning "a long journey", especially in Africa, is defined as an overland journey.

Safari as a distinctive way of hunting was popularised by the US author Ernest Hemingway and President Theodore Roosevelt. A safari may consist of a several-days- or even weeks-long journey, with camping in the bush or jungle, while pursuing big game. Nowadays, it is often used to describe tours through African national parks to watch or hunt wildlife.

Hunters are usually tourists, accompanied by licensed and highly regulated professional hunters, local guides, skimmers, and porters in more difficult terrains. A special safari type is the solo-safari, where all the license acquiring, stalking, preparation, and outfitting is done by the hunter himself.

United Kingdom

Unarmed fox hunting on horseback with hounds is the type of hunting most closely associated with the United Kingdom; in fact, "hunting" without qualification implies fox hunting. What in other countries is called "hunting" is called "shooting" (birds) or "stalking" (deer) in Britain. Originally a form of vermin control to protect livestock, fox hunting became a popular social activity for newly wealthy upper classes in Victorian times and a traditional rural activity for riders and foot followers alike. Similar to fox hunting in many ways is the chasing of hares with hounds. Pairs of Sight hounds (or long-dogs), such as greyhounds, may be used to pursue a hare in coursing, where the greyhounds are marked as to their skill in coursing the hare (but are not intended to actually catch it), or the hare may be pursued with scent hounds such as beagles or harriers. Other sorts of foxhounds may also be used for hunting stags (deer) or mink. Deer stalking with rifles is carried out on foot without hounds, using stealth.



Fig. 41—Nobleman in Hunting Costume, provided by his servant, trying to kill the head of a stag—From a Miniature in the Book of Hours of the Duke de la Cour de Savoie—Manuscript of the Frenchman's Library (British Library of Paris)

Nobleman in hunting costume with his servant following the scent of a stag, 14th century



A *Shikar* party in Mandalay, Burma, soon after the conclusion of the Third Anglo-Burmese War in 1886, when Burma was annexed to British India



Explorer and big game hunter Samuel Baker chased by an elephant

These forms of hunting have been controversial in the UK. Animal welfare supporters believe that hunting causes unnecessary suffering to foxes, horses, and hounds. Proponents argue that it is culturally and perhaps economically important. Using dogs to chase wild mammals was made illegal in February 2005 by the Hunting Act 2004; there were a number of exemptions (under which the activity may not be illegal) in the act for hunting with hounds, but no exemptions at all for hare-coursing.

Shooting traditions

Game birds, especially pheasants, are shot with shotguns for sport in the UK; the British Association for Shooting and Conservation says that over a million people per year participate in shooting, including game shooting, clay pigeon shooting, and target shooting.^[31]

Shooting as practised in Britain, as opposed to traditional hunting, requires little questing for game—around thirty-five million birds are released onto shooting estates every year, some having been factory farmed. Shoots can be elaborate affairs with guns placed in assigned positions and assistants to help load shotguns. When in position, "beaters" move through the areas of cover, swinging sticks or flags to drive the game out. Such events are often called "drives". The open season for grouse in the UK begins on 12 August, the so-called Glorious Twelfth. The definition of game in the United Kingdom is governed by the Game Act 1831.

United States

North American hunting pre-dates the United States by thousands of years and was an important part of many pre-Columbian Native American cultures. Native Americans retain some hunting rights and are exempt from some laws as part of Indian treaties and otherwise under federal law—examples include eagle feather laws and exemptions in the Marine Mammal Protection Act. This is considered particularly important in Alaskan native communities.

Hunting is primarily regulated by state law; additional regulations are imposed through United States environmental law in the case of migratory birds and endangered species. Regulations vary widely from state to state and govern the areas, time periods, techniques and methods by which specific game animals may be hunted. Some states make a distinction between protected species and unprotected species (often vermin or varmints for which there are no hunting regulations). Hunters of protected species require a hunting license in all states, for which completion of a hunting safety course is sometimes a prerequisite.

Typically, game animals are divided into several categories for regulatory purposes. Typical categories, along with example species, are as follows:

- *Big game*: white-tailed deer, mule deer, moose, elk, caribou, bear, bighorn sheep, pronghorn, boar, javelina, bison
- *Small game*: rabbit, hare, squirrel, opossum, raccoon, porcupine, skunk, ring-tailed cat, armadillo, ruffed grouse
- *Furbearers*: beaver, red fox, mink, pine marten, musk rat, otter, bobcat
- *Predators*: cougar (mountain lion and panther), wolf, coyote
- *Upland game bird*: grouse, woodcock, chukar, pheasant, quail, dove
- *Waterfowl*: duck, teal, merganser, geese, swan

Hunting big game typically requires a "tag" for each animal harvested. Tags must be purchased in addition to the hunting license, and the number of tags issued to an individual is typically limited. In cases where there are more prospective hunters than the quota for that species, tags are usually assigned by lottery. Tags may be further restricted to a specific area, or wildlife management unit. Hunting migratory waterfowl requires a duck stamp from the Fish and Wildlife Service in addition to the appropriate state hunting license.

Harvest of animals other than big game is typically restricted by a bag limit and a possession limit. A bag limit is the maximum number of a specific animal species that an individual can harvest in a single day. A possession limit is the maximum number of a specific animal species that can be in an individual's possession at any time.



a young male hunter with a spike (two point white-tailed deer)



An archer with a compound hunting bow

Carrying a bear trophy head at the Kodiak Archipelago

Shooting

Gun usage in hunting is typically regulated by game category, area within the state, and time period. Regulations for big-game hunting often specify a minimum caliber or muzzle energy for firearms. The use of rifles is often banned for safety reasons in areas with high population densities or limited topographic relief. Regulations may also limit or ban the use of lead in ammunition because of environmental concerns. Specific seasons for bow hunting or muzzle-loading black-powder guns are often established to limit competition with hunters using more effective weapons.

Hunting in the United States is not associated with any particular class or culture; a 2006 poll showed seventy-eight percent of Americans supported legal hunting,^[32] although relatively few Americans actually hunt. At the beginning of the 21st century, just six percent of Americans hunted. Southerners in states along the eastern seaboard hunted at a rate of five percent, slightly below the national average, and while hunting was more common in other parts of the South at nine percent, these rates did not surpass those of the Plains states, where twelve percent of Midwesterners hunted. Hunting in other areas of the country fell below the national average.^[33] Overall, in the 1996–2006 period, the number of hunters over the age of sixteen declined by ten percent, a drop attributable to a number of factors including habitat loss and changes in recreation habits.^[34]

Regulation

Regulation of hunting within the United States dates from the 19th century. Some modern hunters see themselves as conservationists and sportsmen in the mode of Theodore Roosevelt and the Boone and Crockett Club. Local hunting clubs and national organizations provide hunter education and help protect the future of the sport by buying land for future hunting use. Some groups represent a specific hunting interest, such as Ducks Unlimited, Pheasants Forever, or the Delta Waterfowl Foundation. Many hunting groups also participate in lobbying the federal government and state government.

Each year, nearly \$200 million in hunters' federal excise taxes are distributed to state agencies to support wildlife management programs, the purchase of lands open to hunters, and hunter education and safety classes. Since 1934, the sale of Federal Duck Stamps, a required purchase for migratory waterfowl hunters over sixteen years old, has raised over \$700 million to help purchase more than 5,200,000 acres (8,100 sq mi; 21,000 km²) of habitat for the National Wildlife Refuge System lands that support waterfowl and many other wildlife species and are often open to hunting. States also collect money from hunting licenses to assist with management of game animals, as designated by law. A key task of federal and state park rangers and game wardens is to enforce laws and regulations related to hunting, including species protection, hunting seasons, and hunting bans.

Varmint hunting

Varmint hunting is an American phrase for the selective killing of non-game animals seen as pests. While not always an efficient form of pest control, varmint hunting achieves selective control of pests while providing recreation and is much less regulated. Varmint species are often responsible for detrimental effects on crops, livestock, landscaping, infrastructure, and pets. Some animals, such as wild rabbits or squirrels, may be utilised for fur or meat, but often no use is made of the carcass. Which species are varmints depends on the circumstance and area. Common varmints may include various rodents, coyotes, crows, foxes, feral cats, and feral hogs. Some animals once considered varmints are now protected, such as wolves. In the US state of Louisiana, a non-native rodent known as a nutria has become so destructive to the local ecosystem that the state has initiated a bounty program to help control the population.

Fair chase

The principles of the fair chase^[35] have been a part of the American hunting tradition for over one hundred years. The role of the hunter-conservationist, popularised by Theodore Roosevelt, and perpetuated by Roosevelt's formation of the Boone and Crockett Club, has been central to the development of the modern fair chase tradition.

Beyond Fair Chase: The Ethic and Tradition of Hunting, a book by Jim Posewitz, describes fair chase:

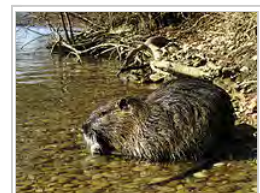
"Fundamental to ethical hunting is the idea of fair chase. This concept addresses the balance between the hunter and the



Hunting camp with dressed deer at Schoodic Lake, Maine, in 1905



a man target practicing for the hunting seasons



The Nutria is hunted as a pest in Louisiana.

hunted. It is a balance that allows hunters to occasionally succeed while animals generally avoid being taken.^[36]

When Internet hunting was introduced in 2005, allowing people to hunt over the Internet using remotely controlled guns, the practice was widely criticised by hunters as violating the principles of fair chase. As a representative of the National Rifle Association (NRA) explained, "The NRA has always maintained that fair chase, being in the field with your firearm or bow, is an important element of hunting tradition. Sitting at your desk in front of your computer, clicking at a mouse, has nothing to do with hunting."^[37]

One hunting club declares that a fair chase shall not involve the taking of animals under the following conditions:

- Helpless in a trap, deep snow or water, or on ice.
- From any power vehicle or power boat.
- By "jacklighting" or shining at night.
- By the use of any tranquilizers or poisons.
- While inside escape-proof fenced enclosures.
- By the use of any power vehicle or power boat for herding or driving animals, including use of aircraft to land alongside or to communicate with or direct a hunter on the ground.
- By the use of electronic devices for attracting, locating or pursuing game or guiding the hunter to such game, or by the use of a bow or arrow to which any electronic device is attached.^[38]

Ranches

Indian blackbuck, nilgai, axis deer, fallow deer, and barasingha can now be found on hunting ranches in Texas, where they were introduced for sport hunting. Hunters can pay upwards of \$4000 as fees for hunting a barasingha.

Russia

The Russian imperial hunts evolved from hunting traditions of early Russian rulers—Grand Princes and Tsars—under the influence of hunting customs of European royal courts. The imperial hunts were organised mainly in Peterhof, Tsarskoye Selo, and Gatchina.

Australia

Hunting in Australia has evolved around the hunting and eradication of various animals considered to be pests. All native animals are protected by law, and can only be killed under special permit. Hunted introduced species include deer, pigs, goats, foxes, and rabbits.

Japan

The numbers of licensed hunters in Japan, including those using snares and guns, is generally decreasing, while their average age is increasing. As of 2010, there were approximately 190,000 registered hunters, approximately 65% of whom were sixty years old or older.^[39]

Trinidad and Tobago

There is a very active tradition of hunting of small to medium-sized wild game in Trinidad and Tobago. Hunting is carried out with firearms, and aided by the use of hounds, with the illegal use of trap guns and snare nets. With approximately 12,000 sport hunters applying for hunting permits in recent years (in a very small country of about the size of the state of Delaware at about 5128 square kilometers and 1.3 million inhabitants), there is some concern that the practice might not be sustainable. In addition there are at present no bag limits and the open season is comparatively very long (5 months - October to February inclusive). As such hunting pressure from legal hunters is very high. Added to that, there is a thriving and very lucrative black market for poached wild game (sold and enthusiastically purchased as expensive luxury delicacies) and the numbers of commercial poachers in operation is unknown but presumed to be fairly high. As a result, the populations of the five major mammalian game species (red-rumped agouti, lowland paca, nine-banded armadillo, collared peccary, and red brocket deer) are thought to be quite low (although scientifically conducted population studies are only just recently being conducted as of 2013). It appears that the red



Hunters with an American black bear in the Great Smoky Mountains



Riders gather for a dingo drive in Morven, Queensland, 1936

brocket deer population has been extirpated on Tobago as a result of over-hunting. Various herons, ducks, doves, the green iguana, the gold tegu, the spectacled caiman and the common opossum are also commonly hunted and poached. There is also some poaching of 'fully protected species', including red howler monkeys and capuchin monkeys, southern tamanduas, Brazilian porcupines, yellow-footed tortoises, Trinidad piping guans and even one of the national birds, the scarlet ibis. Legal hunters pay very small fees to obtain hunting licences and undergo no official basic conservation biology or hunting-ethics training. There is presumed to be relatively very little subsistence hunting in the country (with most hunting for either sport or commercial profit). The local wildlife management authority is under-staffed and under-funded, and as such very little in the way of enforcement is done to uphold existing wildlife management laws, with hunting occurring both in and out of season, and even in wildlife sanctuaries. There is some indication that the government is beginning to take the issue of wildlife management more seriously, with well drafted legislation being brought before Parliament in 2015. It remains to be seen if the drafted legislation will be fully adopted and financially supported by the current and future governments, and if the general populace will move towards a greater awareness of the importance of wildlife conservation and change the culture of wanton consumption to one of sustainable management.

Wildlife management

Hunting is claimed to give resource managers an important tool^{[40][41]} in managing populations that might exceed the carrying capacity of their habitat and threaten the well-being of other species, or, in some instances, damage human health or safety.^[42] However, in most circumstances carrying capacity is determined by a combination habitat and food availability, and hunting for 'population control' has no effect on the annual population of species. In some cases, it can increase the population of predators such as coyotes by removing territorial bounds that would otherwise be established, resulting in excess neighbouring migrations into an area, thus artificially increasing the population. Hunting advocates assert that hunting reduces intraspecific competition for food and shelter, reducing mortality among the remaining animals. Some environmentalists assert that (re)introducing predators would achieve the same end with greater efficiency and less negative effect, such as introducing significant amounts of free lead into the environment and food chain.

In the United States, wildlife managers are frequently part of hunting regulatory and licensing bodies, where they help to set rules on the number, manner and conditions in which game may be hunted.

Management agencies sometimes rely on hunting to control specific animal populations, as has been the case with deer in North America. These hunts may sometimes be carried out by professional shooters, although others may include amateur hunters. Many US city and local governments hire professional and amateur hunters each year to reduce populations of animals such as deer that are becoming hazardous in a restricted area, such as neighbourhood parks and metropolitan open spaces.

A large part of managing populations involves managing the number and, sometimes, the size or age of animals harvested so as to ensure the sustainability of the population. Tools that are frequently used to control harvest are bag limits and season closures, although gear restrictions such as archery-only seasons are becoming increasingly popular in an effort to reduce hunter success rates.

Bag limits

Bag limits are provisions under the law that control how many animals of a given species or group of species can be killed, although there are often species for which bag limits do not apply. There are also jurisdictions where bag limits are not applied at all or are not applied under certain circumstances. The phrase *bag limits* comes from the custom among hunters of small game to carry successful kills in a small basket, similar to a fishing creel.

Where bag limits are used, there can be daily or seasonal bag limits; for example, ducks can often be harvested at a rate of six per hunter per day.^[43] Big game, like moose, most often have a seasonal bag limit of one animal per hunter. Bag limits may also regulate the size, sex, or age of animal that a hunter can kill. In many cases, bag limits are designed to allocate harvest among the hunting population more equitably rather than to protect animal populations.

Without bag limits the wildlife would be heavily under populated. Poaching or not obeying a bag limit effects the population. Without bag limits more animals would be harvested than can maintain the population. It is still good to reach the bag limit though. Without hunting overpopulation could starve the animals. More animals would also be hit by cars which could effect humans as well.

Closed and open season

A closed season is a time during which hunting an animal of a given species is contrary to law. Typically, closed seasons are designed to protect a species when they are most vulnerable or to protect them during their breeding season.^[44] By extension, the period that is not the closed season is known as the open season.

Laws

Illegal hunting and harvesting of wild species contrary to local and international conservation and wildlife management laws is called poaching. Game preservation is one of the tactics used to prevent poaching. Violations of hunting laws and regulations involving poaching are normally punishable by law.^[45] Punishment can include confiscation of equipment, fines and/or a prison sentence. In Costa Rica, all forms of sport hunting have been illegal since 10 December 2012.^[46]

Methods

Historical, subsistence, and sport hunting techniques can differ radically, with modern hunting regulations often addressing issues of where, when, and how hunts are conducted. Techniques may vary depending on government regulations, a hunter's personal ethics, local custom, hunting equipment, and the animal being hunted. Often a hunter will use a combination of more than one technique. Laws may forbid sport hunters from using some methods used primarily in poaching and wildlife management.

- *Baiting* is the use of decoys, lures, scent, or food.
 - *Battue* involves scaring animals (by beating sticks) into a killing zone or ambush.
 - *Beagling* is the use of beagles in hunting rabbits, and sometimes in hunting foxes.
 - *Beating* uses human beaters to flush out game from an area and/or drive it into position.
 - *Blind hunting* or *stand hunting* is waiting for animals from a concealed or elevated position.
 - *Calling* is the use of animal noises to attract or drive animals.
 - *Camouflage* is the use of visual or odour concealment to blend with the environment.
 - *Dogs* may be used to course or to help flush, herd, drive, track, point at, pursue, or retrieve prey.
 - *Driving* is the herding of animals in a particular direction, usually toward another hunter in the group.
 - *Flushing* is the practice of scaring animals from concealed areas.
 - *Ghillie suit* is a type of gear a person can wear to blend with environment.^[47]
 - *Glassing* is the use of optics, such as binoculars, to locate animals more easily.
 - *Glue* is an indiscriminate passive form to kill birds.^[48]
 - *Internet hunting* is a method of hunting over the Internet using webcams and remotely controlled guns.
-
- *Netting* involves using nets, including active netting with the use of cannon nets and rocket nets.
 - *Persistence hunting* is the use of running and tracking to pursue the prey to exhaustion.^[49]
 - *Scouting* for game is typically done prior to a hunt and will ensure the desired species are in a chosen area. Looking for animal sign such as tracks, scat, etc.... and utilizing "trail cameras" are commonly used tactics while scouting.
 - *Solunar theory* says that animals move according to the location of the moon in comparison to their bodies and is said to have been used long before this by hunters to know the best times to hunt their desired game.^[50]
 - *Spotlighting* or *shining* is the use of artificial light to find or blind animals before killing.
 - *Stalking* or *still hunting* is the practice of walking quietly in search of animals or in pursuit of an individual animal.
 - *Tracking* is the practice of reading physical evidence in pursuing animals.
 - *Trapping* is the use of devices such as snares, pits, and deadfalls to capture or kill an animal.



American bison being chased off a cliff as seen and painted by Alfred Jacob Miller



Master or whipper-in and fox hounds drawing a wood. Hunting in Yorkshire, northern England, in 2005: the last day of fully legal, proper, fox hunting



Africans hunting the lion, 1841

Trophy hunting

Trophy hunting is the selective seeking of wild game. It may also include the controversial hunting of captive or semi-captive animals expressly bred and raised under controlled or semi-controlled conditions so as to attain trophy characteristics; this is sometimes known as canned hunts.^[51]

History

In the 19th century, southern and central European sport hunters often pursued game only for a trophy, usually the head or pelt of an animal, which was then displayed as a sign of prowess. The rest of the animal was typically discarded. Some cultures, however, disapprove of such waste. In Nordic countries, hunting for trophies was—and still is—frowned upon. Hunting in North America in the 19th century was done primarily as a way to supplement food supplies, although it is now undertaken mainly for sport. The safari method of hunting was a development of sport hunting that saw elaborate travel in Africa, India and other places in pursuit of trophies. In modern times, trophy hunting persists and is a significant industry in some areas.



Royal Liechtenstein trophy collection at Úsov Château, the Czech Republic

Conservation tool

According to the U.S. Fish and Wildlife Service, hunting "provides an economic incentive" for ranchers to continue to breed those species, and that hunting "reduces the threat of the species' extinction."^{[52][53]}

A scientific study in the journal, *Biological Conservation*, states that trophy hunting is of "major importance to conservation in Africa by creating economic incentives for conservation over vast areas, including areas which may be unsuitable for alternative wildlife-based land uses such as photographic ecotourism."^[54] However, another study states that less than 3% of a trophy hunters' expenditures reach the local level, meaning that the economic incentive and benefit is "minimal, particularly when we consider the vast areas of land that hunting concessions occupy."^[55]

Financial incentives from trophy hunting effectively more than double the land area that is used for wildlife conservation, relative to what would be conserved relying on national parks alone according to *Biological Conservation*,^[54] although local communities usually derive no more than 18 cents per hectare from trophy hunting.^[55]

Trophy hunting has been considered essential for providing economic incentives to conserve large carnivores according to research studies in *Conservation Biology*,^[56] *Journal of Sustainable Tourism*,^[57] *Wildlife Conservation by Sustainable Use*,^[58] and *Animal Conservation*.^{[56][59]} Studies by the Centre for Responsible Tourism^[60] and the IUCN state that ecotourism, which includes more than hunting, is a superior economic incentive, generating twice the revenue per acre and 39 times more permanent employment.^[61]

Controversy

Trophy hunting is most often criticised when it involves rare or endangered animals.^[62] Opponents may also see trophy hunting as an issue of morality^[63] or animal cruelty, criticising the killing of living creatures for recreation. Victorian era dramatist W. S. Gilbert remarked, "Deer-stalking would be a very fine sport if only the deer had guns."^[64]

There is also debate about the extent to which trophy hunting benefits the local economy. Hunters argue that fees paid contribute to the local economy and provide value to animals that would otherwise be seen as competition for grazing, livestock, and crops.^[65] This analysis is disputed by opponents of trophy hunting.^[66] Some argue that the animals are worth more to the community for ecotourism than hunting.^[67]

Economics

A variety of industries benefit from hunting and support hunting on economic grounds. In Tanzania, it is estimated that a safari hunter spends fifty to one hundred times that of the average ecotourist. While the average photo tourist may seek luxury accommodation, the average safari hunter generally stays in tented camps. Safari hunters are also more likely to use remote areas, uninviting to the typical ecotourist. Advocates argue that these hunters allow for anti-poaching activities and revenue for local communities.

In the United Kingdom, the game hunting of birds as an industry is said to be extremely important to the rural economy. The Cobham Report of 1997 suggested it to be worth around £700 million, and hunting and shooting lobby groups claimed it to be worth over a billion pounds less than ten years later.

Hunting also has a significant financial impact in the United States, with many companies specialising in hunting equipment or speciality tourism. Many different technologies have been created to assist hunters, even including iPhone applications.^[68] Today's hunters come from a broad range of economic, social, and cultural backgrounds. In 2001, over thirteen million hunters averaged eighteen days hunting, and spent over \$20.5 billion on their sport. In the US, proceeds from hunting licenses contribute to state game management programs, including preservation of wildlife habitat.



Chatelherault, built by William Adam in 1743 as the Duke of Hamilton's hunting lodge

Environmental problems

Lead bullets that miss their target or remain in an unretrieved carcass become a persistent toxicant in the environment. Waterfowl or other birds may ingest the lead and poison themselves with the neurotoxicant. Since 1991, US federal law forbids lead shot in waterfowl hunts, and 30 states have some type of restriction.^[69]

In December 2014, a federal appeals court denied a lawsuit by environmental groups that the EPA must use the Toxic Substances Control Act to regulate lead in shells and cartridges. The groups sought EPA to regulate "spent lead", yet the court found EPA could not regulate spent lead without also regulating cartridges and shells.^[70]

Conservation

Hunters have been driving forces throughout history in the movement to ensure the preservation of wildlife habitats and wildlife for further hunting.^[71] However, excessive hunting and poachers have also contributed heavily to the endangerment, extirpation and extinction of many animals, such as the quagga, the great auk, Steller's sea cow, the thylacine, the bluebuck, the Arabian oryx, the Caspian and Javan tigers, the markhor, the Sumatran rhinoceros, the bison, the North American cougar, the Altai argali sheep, the Asian elephant and many more, primarily for commercial sale or sport. All these animals have been hunted to endangerment or extinction.

^[3]^[72]^[73]^[74]^[75]^[76]^[77]^[78]^[79]^[80]^[81]^[82]



Punishment of a Hunter (c. 1647) by Paulus Potter

Legislation

Pittman–Robertson Wildlife Restoration Act of 1937

In 1937, American hunters successfully lobbied the US Congress to pass the Pittman-Robertson Wildlife Restoration Act, which placed an eleven percent tax on all hunting equipment. This self-imposed tax now generates over \$700 million each year and is used exclusively to establish, restore and protect wildlife habitats.^[83] The act is named for Nevada Senator Key Pittman and Virginia Congressman Absalom Willis Robertson.

Federal Duck Stamp program

On 16 March 1934, President Franklin D. Roosevelt signed the Migratory Bird Hunting Stamp Act, which requires an annual stamp purchase by all hunters over the age of sixteen. The stamps are created on behalf of the program by the US Postal Service and depict wildlife artwork chosen through an annual contest. They play an important role in habitat conservation because ninety-eight percent of all funds generated by their sale go directly toward the purchase or lease of wetland habitat for protection in the National Wildlife Refuge System. In addition to waterfowl, it is estimated that one third of the nation's endangered species seek food and shelter in areas protected using Duck Stamp funds.

Since 1934, the sale of Federal Duck Stamps has generated \$670 million, and helped to purchase or lease 5,200,000 acres (8,100 sq mi; 21,000 km²) of habitat. The stamps serve as a license to hunt migratory birds, an entrance pass for all National Wildlife Refuge areas, and are also considered collectors items often purchased for aesthetic reasons outside of the hunting and

birding communities. Although non-hunters buy a significant number of Duck Stamps, eighty-seven percent of their sales are contributed by hunters, which is logical, as hunters are required to purchase them. Distribution of funds is managed by the Migratory Bird Conservation Commission (MBCC).^[84]

Species

Arabian oryx

The Arabian oryx, a species of large antelope, once inhabited much of the desert areas of the Middle East.^[77] However, the species' striking appearance made it (along with the closely related scimitar-horned oryx and addax) a popular quarry for sport hunters, especially foreign executives of oil companies working in the region. The use of automobiles and high-powered rifles destroyed their only advantage: speed, and they became extinct in the wild exclusively due to sport hunting in 1972. The scimitar-horned oryx followed suit, while the addax became critically endangered.^[85] However, the Arabian oryx has now made a comeback and been upgraded from "extinct in the wild" to "vulnerable" due to conservation efforts like captive breeding.^[86]

Markhor

The markhor is an endangered species of wild goat which inhabits the mountains of Central Asia and Pakistan. The colonization of these regions by Britain gave British sport hunters access to the species, and they were hunted heavily, almost to the point of extinction. Only their willingness to breed in captivity and the inhospitability of their mountainous habitat prevented this. Despite these factors, the markhor is still endangered.^[87]

American bison

The American bison is a large bovid which inhabited much of western North America prior to the 1800s, living on the prairies in large herds. However, the vast herds of bison attracted market hunters, who killed dozens of bison for their hides only, leaving the rest to rot. Thousands of these hunters quickly eliminated the bison herds, bringing the population from several million in the early 1800s to a few hundred by the 1880s. Conservation efforts have allowed the population to increase, but the bison remains near-threatened.^[88]

White rhino

The *Journal of International Wildlife Law and Policy* cites that the legalization of white rhinoceros hunting in South Africa motivated private landowners to reintroduce the species onto their lands. As a result, the country saw an increase in white rhinos from fewer than one hundred individuals to more than 11,000, even while a limited number were killed as trophies.^[89]

However, the illegal hunting of rhinoceros for their horns is highly damaging to the population and is currently growing globally,^[90] with 1004 being killed in South Africa alone according to the most recent estimate.^[91]

Other species

According to Richard Conniff, Namibia is home to 1,750 of the roughly 5,000 black rhinos surviving in the wild because it allows trophy hunting of various species. Namibia's mountain zebra population has increased to 27,000 from 1,000 in 1982. Elephants, which "are gunned down elsewhere for their ivory", have gone to 20,000 from 15,000 in 1995. Lions, which were on the brink of extinction "from Senegal to Kenya", are increasing in Namibia.^[92]

In contrast, Botswana has recently been forced to ban trophy hunting following a precipitous wildlife decline.^[93] The numbers of antelope plummeted across Botswana, with a resultant decline in predator numbers, while elephant numbers remained stable and hippopotamus numbers rose. According to the government of Botswana, trophy hunting is at least partly to blame for this, but many other factors, such as poaching, drought and habitat loss are also to blame.^[94] Uganda recently did the same, arguing that "the share of benefits of sport hunting were lopsided and unlikely to deter poaching or improve [Uganda's] capacity to manage the wildlife reserves."^[95]

Studies

A study issued by the Wildlife Society concluded that hunting and trapping are cost effective tools that reduce wildlife damage by reducing a population below the capacity of the environment to carry it and changing the behaviors of animals to stop them from causing damage. The study furthermore states that the cessation of hunting could cause wildlife to be severely harmed, rural property values to fall, and the incentive of landowners to maintain natural habitats to diminish.^[96]

See also

- Animal rights
- Anti-hunting
- Bambi effect
- Blood sport
- Bowhunting
- Bushfood
- Bushmeat
- Camping
- Chase
- Conservation biology
- Federation of Associations for Hunting and Conservation of the EU
- Hiking equipment
- Human hunting
- Hunt Saboteurs Association (HSA)
- Hunting horn
- Nimrod
- Poaching
- Sir Gawain and the Green Knight
- Tapetum lucidum eyeshine
- *The Sound of His Horn*
- Trophy hunting
- Wilderness backpacking

References

1. Williams, Ted. "Wanted: More Hunters," *Audubon* magazine, March 2002, copy (<http://classic-web.archive.org/web/20071013120158/http://magazine.audubon.org/incite/incite0203.html>) retrieved 26 October 2007.
2. Harper, Craig A. "Quality Deer Management Guidelines for Implementation" (PDF). Agricultural Extension Service, The University of Tennessee. Archived from the original (PDF) on 12 September 2006. Retrieved 20 December 2006.
3. "Red List Overview". IUCN Red List. International Union for Conservation of Nature. Retrieved 8 September 2010.
4. Harper, Douglas. "Hunt". Online Etymology Dictionary. Retrieved December 24, 2016.
5. Gaudzinski, S (2004). "Subsistence patterns of Early Pleistocene hominids in the Levant – Taphonomic evidence from the "Ubeidiya Formation (Israel)". *Journal of Archaeological Science*. **31**: 65–75. doi:10.1016/s0305-4403(03)00100-6.
6. Rabinovich, R.; Gaudzinski-Windheuser, S.; Goren-Inbar, N. (2008). "Systematic butchering of fallow deer (Dama) at the early Middle Pleistocene Acheulian site of Gesher Benot Ya'aqov (Israel)". *Journal of Human Evolution*. **54**: 134–149. doi:10.1016/j.jhevol.2007.07.007.
7. In 1992, trace element studies of the strontium/calcium ratios in robust australopithecine fossils suggested the possibility of animal consumption, as did a 1994 using stable carbon isotopic analysis. Billings, Tom. "Comparative Anatomy and Physiology Brought Up to Date—continued, Part 3B". Retrieved 6 January 2007.
8. Wong, Kate (18 March 2014). "How Hunting Made Us Human". *Scientific American*. **310** (4). Retrieved 26 March 2014.
9. Surovell, Todd; Nicole Waguespack; P. Jeffrey Brantingham (13 April 2005). "Global archaeological evidence for proboscidean overkill" (PDF). *Proceedings of the National Academy of Sciences*. The National Academy of Sciences (USA). **102** (17): 6231–6236. doi:10.1073/pnas.0501947102. PMC 1087946. PMID 15829581. Retrieved 1 January 2007.
10. American Geophysical Union paper PP43A-01, abstract (http://www.agu.org/meetings/sm07/sm07-sessions/sm07_PP43A.html) retrieved 26 October 2007
11. Miller, G. H. (2005). "Ecosystem Collapse in Pleistocene Australia and a Human Role in Megafaunal Extinction". *Science*. **309** (5732): 287–290. doi:10.1126/science.1111288. PMID 16002615.
12. Prideaux, G.J.; et al. (2007). "An arid-adapted middle Pleistocene vertebrate fauna from south-central Australia". *Nature*. **445**: 422–425. doi:10.1038/nature05471. PMID 17251978.
13. "Bonobos Hunt Other Primates". *livescience.com*. 2008. Retrieved 5 August 2012.
14. Courtney Laird. "Bonobo social spacing". *Davidson College*. Archived from the original on 23 January 2008. Retrieved 10 March 2008.
15. Lower Palaeolithic hunting spears from Germany. Hartmut Thieme. Letters to Nature. *Nature* 385, 807 – 810 (27 February 1997); doi:10.1038/385807a0 (<https://dx.doi.org/10.1038%2F385807a0>) [1] (<http://www.nature.com/nature/journal/v385/n6619/abs/385807a0.html>)
16. Monte Morin, "Stone-tipped spear may have much earlier origin" (<http://articles.latimes.com/2012/nov/16/science/la-sci-hafting-spears-20121116>), *Los Angeles Times*, 16 November 2012
17. Rick Weiss, "Chimps Observed Making Their Own Weapons" (<http://www.washingtonpost.com/wp-dyn/content/article/2007/02/22/AR2007022201007.html>), *The Washington Post*, 22 February 2007
18. Zenin, Vasily N.; Evgeny N. Mashenko; Sergey V. Leshchinskiy; Aleksandr F. Pavlov; Pieter M. Grootes; Marie-Josée Nadeau (24–29 May 2003). "The First Direct Evidence of Mammoth Hunting in Asia (Lugovskoye Site, Western Siberia) (L)". *3rd International Mammoth Conference*. Dawson City, Yukon Territory, Canada: John Storer, Government of Yukon. Archived from the original on 17 November 2006. Retrieved 1 January 2007. External link in |publisher= (help)
19. "In North America and Eurasia the species has long been an important resource—in many areas *the* most important resource—for peoples inhabiting the northern boreal forest and tundra regions. Known human dependence on caribou/wild reindeer has a long history, beginning in the Middle Pleistocene (Banfield 1961:170; Kurtén 1968:170) and continuing to the present...The caribou/wild reindeer is thus an animal that has been a major resource for humans throughout a tremendous geographic area and across a time span of tens of thousands of years." Burch, Ernest S.; Jr (1972). "The Caribou/Wild Reindeer as a Human Resource". *American Antiquity*. **37** (3): 339–368. doi:10.2307/278435.
20. "The Nature Conservancy". *The Nature Conservancy*. Retrieved 2016-09-15.
21. Binford, Louis (1986). "Human ancestors: Changing views of their behavior". *Journal of Anthropological Archaeology*. **3**: 235–257.
22. Blumenschine, Robert J. (1986) *Early hominid scavenging opportunities: Implications of carcass availability in the Serengeti and Ngorongoro ecosystems*. Oxford, England: B.A.R.

23. Machiavelli provides a rationale, if not the origin, of noble hunting: Machiavelli, Niccolò (1531). "Discourses on the first decade of Titus Livius, Book 3". In Gilbert, Allan. *Machiavelli: The Chief Works and Others*. I. Duke University Press (published 1989). p. 516. ISBN 9780822381570. Retrieved 27 December 2013. "[...] hunting expeditions, as Xenophon makes plain, are images of war; therefore to men of rank such activity is honorable and necessary."
24. Dunlap, Thomas R. (1999). "Remaking Worlds: European models in New Lands". *Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand*. Studies in Environment and History. Cambridge University Press. p. 61. ISBN 9780521657006. Retrieved 24 December 2013. "The settlers adopted sport hunting, as they did other elements of British culture, but they had to adapt it. Social circumstances and biological realities reshaped it and gave it new meaning. There was no elite monopolizing access to land. Indeed, the great attraction and boast of these nations were of land for all."
25. In his commentary on Martianus Capella's early 5th-century work, *The Marriage of Philology and Mercury*, one of the main sources for medieval reflection on the liberal arts.
26. "Hunting with dogs « Defra". Defra.gov.uk. 18 February 2005. Retrieved 20 April 2012.
27. http://www.aish.com/ci/be/The_Jewish_Ethicist_Judaism_and_Hunting.html
28. http://www.chabad.org/library/article_cdo/aid/1589324/jewish/The-Jewish-View-on-Hunting-for-Sport.htm
29. <http://www.newmuslimguide.com/en/your-food-and-drink/66>
30. HelplineLaw. "Indian Wildlife Protection Act, 1972". HelplineLaw.com. Retrieved 20 April 2012.
31. BASC site (<http://basc.org.uk/media-centre/basc-appeals/basc-youth-appeal>)
32. Results (http://www.responsivemanagement.com/download/news/newsrsls_09_06.pdf) from a 2006 poll (813 people were polled) done by Responsive Management
33. National statistics from US Department of the Interior, Fish and Wildlife Service and US Department of Commerce, US Census Bureau, 2001 National Survey of Fishing, Hunting and Wildlife Associated Recreation, 27.
34. Jackson, Patrick. *Number of hunters is dwindling—Urbanization and cultural changes discourage newcomers to the sport* (<http://www.trailcamerareviews.net/number-hunters-dwindling/>).
35. Interpretations of the Fair Chase can be found on the web sites of various hunter's organizations, such as the Boone and Crockett Club (http://www.boone-crockett.org/huntingEthics/ethics_fairchase.asp?area=huntingEthics) and Hunt Fair Chase (<http://www.huntfairchase.com/>).
36. Posewitz, Jim (1 August 1994). *Beyond Fair Chase: The Ethic and Tradition of Hunting*. Globe Pequot Press. p. 57. ISBN 9781560442837.
37. Humane Society Wildlife Abuse Campaign, Fact Sheet on Internet Hunting (http://www.humanesociety.org/issues/internet_hunting/facts/internet_hunting_fact_sheet.html#.UzjiW61dW9Y)
38. "The Rules of Fair Chase". Chatfield, Minnesota: Pope and Young Club. Archived from the original on 24 May 2012. Retrieved 24 May 2012. "While inside escape-proof fenced enclosures"
39. <http://www.env.go.jp/nature/choju/docs/docs4/menkyo.pdf>
40. Chardonnet, P; Clers, B; Fischer, J; Gerhold, R; Jori, F; Lamarque, F (2002). "The Value of Wildlife" (PDF). *Rev. sci. tech. Off. Int. Epiz.* **21** (1): 15–51., posted by the Southeastern Cooperative Wildlife Disease Study, Accessed 12 December 2006
41. Herring, Hal. *Today's sportsmen and sportswomen are a powerful force for conservation* (<http://www.trailcamerareviews.net/hunters-conservation>)
42. The hunting section of the U.S. Fish and Wildlife Service (<http://www.fws.gov/hunting/>) site includes articles and statistics relating to wildlife management.
43. Debbie Young, 404-679-7292. "US Fish and Wildlife Service 2003 proposed bag limits for waterfowl". Fws.gov. Retrieved 20 April 2012.
44. When can I hunt, Game Hunting, Recreation and Tourism; The Department of Sustainability and Environment (DSE), Government of Victoria, Australia. (<http://www.dse.vic.gov.au/DSE/nrenrt.nsf/childdocs/-7380F92E35E27D99CA2573750023D375-DE772B04C4005AEDCA25737500243226?open>), Accessed 4 December 2008. Archived (<https://web.archive.org/web/20110401063439/http://www.dse.vic.gov.au/DSE/nrenrt.nsf/childdocs/-7380F92E35E27D99CA2573750023D375-DE772B04C4005AEDCA25737500243226?open>) 1 April 2011 at the Wayback Machine.
45. "Hunting Laws and Regulations". *elk-hunting.org*. 2012. Retrieved 24 August 2012.
46. [http://www.americaeconomia.com/politica-sociedad/politica/costa-rica-es-el-primer-pais-latino-en-prohibir-la-caza-de-animales-como-](http://www.americaeconomia.com/politica-sociedad/politica/costa-rica-es-el-primer-pais-latino-en-prohibir-la-caza-de-animales-como-47.)
47. "ghillie suit".
48. "Catalonian fiat, with picture". Gepec.org. Retrieved 20 April 2012.
49. Nancy L. Struna, *People of Prowess: Sport, Leisure, and Labor in Early Anglo-America*(1996), ISBN 0-252-06552-2
50. Knight, John. "Solunar Tables for Fishermen Produced by Register-Guard." *The Register-Guard*, 11 May 1949: 10. Print.
51. MOTIVATIONS OF INTERNATIONAL TROPHY HUNTERS CHOOSING TO HUNT IN SOUTH AFRICA (<http://dspace.nmmu.ac.za:8080/jspui/bitstream/10948/1328/1/Examination%20Copy%20Final%20Document%20Dissertation.pdf>)
52. <http://www.fws.gov/policy/library/2005/05-17432.pdf>
53. <http://www.cbsnews.com/news/can-hunting-endangered-animals-save-the-species/>
54. <http://www.africanwildlifeconservationfund.org/wp-content/uploads/2011/09/Economic-and-conservation-significance.pdf>
55. <http://www.ifaw.org/sites/default/files/Ecolarge-2013-200m-question.pdf>
56. <http://www.cbs.umn.edu/sites/default/files/public/downloads/Effects%20of%20trophy%20hunting%20on%20populations%20of%20lions%20and%20leopards%20in%20TZ.pdf>
57. <http://www.tandfonline.com/doi/abs/10.1080/09669589708667294#.U8G7cFkuigY>
58. "Hunting and Its Benefits: an Overview of Hunting in Africa with Special Reference to Tanzania". *Wildlife Conservation by Sustainable Use*: 295–313. doi:10.1007/978-94-011-4012-6_15.
59. <http://www.ewca.gov.et/sites/default/files/Lindsey%20et%20al%20%202006%20Potential%20of%20trophy%20hunting%20to%20create%20incentives%20for%20wildlifeconservationin%20Africa.pdf>
60. <http://www.cbc.ca/news/canada/british-columbia/bear-watching-more-profitable-than-bear-hunting-says-study-1.2488311>
61. <http://www.smithsonianmag.com/travel/should-trophy-hunting-of-lions-be-banned-155657735/>
62. Early Day Motion on trophy hunting (<http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=28737&SESSION=875>) Archived (<https://web.archive.org/web/20060222022827/http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=28737&SESSION=875>) 22 February 2006 at the Wayback Machine.

63. see, for example, this internet page (http://flaflooga.com/trophy_hunting.php) Archived (https://web.archive.org/web/20150710234644/http://flaflooga.com/trophy_hunting.php) 10 July 2015 at the Wayback Machine.
64. Grossmith, George in *The Daily Telegraph*, 7 June 1911
65. Martin, Glen. *The lion, once king of vast African savanna, suffers alarming decline in population* (<http://sfgate.com/cgi-bin/article.cgi?file=/c/a/2005/10/06/MNG1UF392D1.DTL>), San Francisco Chronicle, 6 October 2005. Retrieved 30 October 2007.
66. League Against Cruel Sports. *The Myth of Trophy Hunting as Conservation* (http://www.league.org.uk/uploads/documents/doc_279.pdf), December 2004. Retrieved 30 October 2007.
67. The International Ecotourism Society (<http://www.ecotourism.org/>) has published articles along this line.(not an actual cite)
68. "Hunting iPhone Apps". Hunting Boots Blog. 13 January 2011.
69. Michael Todd (14 October 2013). "Gunning for Lead Bullets". *Pacific Standard*. Retrieved 30 December 2014.
70. Zack Colman (23 December 2014). "EPA can't regulate lead bullets, says federal court". *Washington Examiner*. Retrieved 30 December 2014.
71. Brockington, Dan. *Nature unbound: conservation, capitalism and the future of protected areas* (<https://books.google.com/books?id=hanwVhP-JFQC&pg=PA47&dq>), Earthscan, 2008.
"The birth of the international conservation movement as we recognize it today was due to the influence of powerful aristocratic hunters who wished to preserve suitable specimens for their sport from the alleged depredations of Africans (Mackenzie, 1988). The international hunting fraternity remains a powerful force behind conservation today."
72. Hack, M.A., East, R. & Rubenstein, D.I. (2008). Equus quagga quagga. In: IUCN 2008. IUCN Red List of Threatened Species. Downloaded on 5 January 2008
73. Montevecchi, William A.; David A. Kirk (1996). "Demography–Great Auk (*Pinguinus impennis*)". *The Birds of North America Online*. Cornell Lab of Ornithology. Retrieved 2010-04-29.
74. Ellis, Richard (2004). *No Turning Back: The Life and Death of Animal Species*. New York City: Harper Perennial. p. 134. ISBN 0-06-055804-0.
75. "Additional Thylacine Topics: Persecution". The Thylacine Museum. 2006. Retrieved 27 November 2006.
76. Skead, C.J. 1987. Historical mammal incidence in the Cape Province. Volume 1 – The Western and Northern Cape. The Department of Nature and Environmental Conservation of the Provincial Administration of the Cape of Good Hope, Cape Town
77. Talbot, Lee Merriam (1960). *A Look at Threatened Species*. The Fauna Preservation Society. pp. 84–91.
78. Geptner, V.G., Sludskii, A. A. (1972). Mlekopitaiuščie Sovetskogo Soiuza. Vysšaia Škola, Moskva. (In Russian; English translation: Heptner, V.G., Sludskii, A.A., Bannikov, A.G.) (1992). *Mammals of the Soviet Union*. Volume II, Part 2: Carnivora (Hyaenas and Cats).
79. Valdez, R. (2008). *Capra falconeri*. In: IUCN 2008. IUCN Red List of Threatened Species. Downloaded on 5 April 2009. Database entry includes a brief justification of why this species is regarded as endangered
80. Staff (December/January2012). "Restoring a Prairie Icon". *National Wildlife (National Wildlife Federation)* 50 (1): 20–25.
81. Cardoza, J.E.; Langlois, S.A. (2002). "The eastern cougar: A management failure?". *Wildlife Society Bulletin*. **30** (1): 265–273.
82. *Endangered Animals – A Reference Guide to Conflicting Issues*
83. "The Pittman–Robertson Federal Aid in Wildlife Restoration Act". United States Fish and Wildlife Service. Retrieved 11 May 2007.
84. "Migratory Bird Conservation Commission". United States Fish and Wildlife Service. Retrieved 31 May 2007.
85. *The Fundamentals of Conservation Biology*, Malcolm L Hunter, Jr. , James P. Gibbs
86. <http://blogs.scientificamerican.com/extinction-countdown/2011/06/17/arabian-oryx-makes-history-as-first-species-to-be-upgraded-from-extinct-in-the-wild-to-vulnerable/>
87. *Endangered Wildlife and Plants of the World*, 2001
88. *American Bison: A Natural History*, By Dale F. Lott, Harry W. Greene, ebrary, Inc, Contributor Harry W. Greene, Edition: illustrated, Published by University of California Press, 2003 ISBN 978-0-520-24062-9
89. <http://conservationmagazine.org/2014/01/can-trophy-hunting-reconciled-conservation/>
90. 'Global surge' in rhino poaching (<http://news.bbc.co.uk/2/hi/science/nature/8388606.stm>) BBC. 1 December 2009
91. "946 rhino killed in 2013". *Eyewitness News*. 19 December 2013. Retrieved 25 December 2013.
92. <http://www.nytimes.com/2014/01/21/opinion/a-trophy-hunt-thats-good-for-rhinos.html>
93. <http://www.bbc.com/news/world-africa-20544251>
94. <https://www.theguardian.com/environment/2011/jun/18/botswana-natural-wonder-brink-of-catastrophe>
95. http://newswatch.nationalgeographic.com/2010/11/23/uganda_ends_sport_hunting/
96. Conover, Michael R. "Effect of Hunting and Trapping on Wildlife Damage." *Wildlife Society Bulletin*, Vol. 29. No. 2 (Summer. 2001). pp. 521-532. Published by: Allen Press. accessdate=19 August 2015 (http://www.njfishandwildlife.com/pdf/bear/policy_lit/conover01.pdf)


Further reading

- International Journal of Environmental Studies (2013) Special Edition: Conservation and Hunting in North America. IJES v 70. <http://www.tandfonline.com/toc/genv20/70/3>
- International Journal of Environmental Studies (2015) Special Edition: Conservation and Hunting in North America II. IJES v72. <http://www.tandfonline.com/toc/genv20/72/5>
- IUCN (2016) Briefing Paper: Informing Decisions on Trophy Hunting. Online at http://cmsdata.iucn.org/downloads/iucn_informingdecisionsontrophyhuntingv1.pdf
- IUCN Species Survival Commission (2012) Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives. Online at https://cmsdata.iucn.org/downloads/iucn_ssc_guiding_principles_on_trophy_hunting_ver1_09aug2012.pdf
- Dickson D. Bruce, Jr., *Mississippi Quarterly* (Spring 1977).
- Kenneth S. Greenberg, *Honor and Slavery: Lies, Duels, Noses, Masks, Dressing as a Woman, Gifts, Strangers, Humanitarianism, Death, Slave Rebellions, the Pro-Slavery Argument, Baseball, Hunting, and Gambling in the Old South* (1996).
- Steven Hahn, *Radical History Review* (1982).
- Charles H. Hudson, Jr., in *Indians, Animals, and the Fur Trade*, ed., Shephard Krech III (1981).

- Stuart A. Marks, *Southern Hunting in Black and White: Nature, History, and Ritual in a Carolina Community* (1991).
- Ted Ownby, *Subduing Satan: Religion, Recreation, and Manhood in the Rural South, 1865–1920* (1990).
- Wiley C. Prewitt, "The Best of All Breathing: Hunting and Environmental Change in Mississippi, 1900–1980" M.A. thesis, (1991).
- Nicolas W. Proctor, *Bathed in Blood: Hunting and Mastery in the Old South* (2002).
- Jacob F. Rivers III, *Cultural Values in the Southern Sporting Narrative* (2002).
- Salem, D.J., and A.N. Rowan, eds. 2003. *The State of the Animals II: 2003* (http://www.humanesociety.org/assets/pdfs/hsp/soa_ii_chap01.pdf). Washington, D.C.: Humane Society Press. (ISBN 0-9658942-7-4)
- Timothy Silver, *A New Face on the Countryside: Indians, Colonists, and Slaves in South Atlantic Forests, 1500–1800* (1990).
- Richard C. Stedman and Thomas A. Heberlein, *Rural Sociology* (2001).
- Nancy L. Struna, *People of Prowess: Sport, Leisure, and Labor in Early Anglo-America* (1996).
- Marek Zukow-Karczewski, *Polowania w dawnej Polsce* (Hunting in the old Poland), "AURA" (A Monthly for the protection and shaping of human environment) 12 (1990).


External links

- Media related to Hunting at Wikimedia Commons
- The Theodore Roosevelt Hunting Library (<http://www.loc.gov/rr/rarebook/coll/208.html>) at the Library of Congress has 254 items on this topic.

	Look up <i>hunting</i> in Wiktionary, the free dictionary.
---	---

Retrieved from "https://en.wikipedia.org/w/index.php?title=Hunting&oldid=757544753"

Categories: Hunting | Blood sports | Dog sports | Survival skills

	Wikiquote has quotations related to: <i>Hunting</i>
---	--

- This page was last modified on 31 December 2016, at 07:46.
- Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.