Endangered animals.

# Bengal tiger

The **Bengal** tiger is a feline, and the most well-known subspecies of tiger. Also called the Royal Bengal Tiger, it is lighter and less imposing than the Siberian tiger. Its population, thanks in particular to the protection actions of the Indian government, has been increasing for several years, in 2019, it probably exceeds 3000 individuals in India.

## Distribution and habitats

The strongest population of Bengal tigers is found in the nature parks of Bengal and Bangladesh. They can also be found in central and northern India as well as Burma and Nepal. Tigers need an extensive living space on which they can hunt. They mark and defend territories of varying size that can exceed 100 km2 for a male. Because they are solitary animals, even a small population needs a large area in which to live and hunt. A tiger has several dens on its home range and uses the one that suits it best at the moment. It is a tiger more versatile than the others at the level of the biotope, it likes to frequent the forest (dense or clear), the savannah (shrub or discovery) as well as the marshes. It usually sleeps in the forest and moves in the morning and late in the day in open savannah and at the edge of marshes in search of water and prey.

## Protection

In 1900, the Indian tiger population was estimated at between 40,000 and 50,000 individuals. By 1972, that figure had dropped to 1,850 and the Indian government established national parks to safeguard its tiger population. A protection program has put it back to about 4,000 in 1984.

The latest census of 2013 released by the Nepalese Minister of Forests and Soil Conservation, puts their population at 198 in Nepal and Bhutan, 150 in Bangladesh, 200 in western Burma. The 2007 census gives 1,411 tigers in India. This figure is lower than that of the 1973 census when Project **Tiger** was launched. In contrast, in the 2014 census, there were 2226 tigers across India, which predicted that the tiger population in India would continue to skyrocket.

## Manners

The Bengal tiger is solitary and nocturnal and does not like to share its domain with other tigers and animals. To discourage intruders, all tigers mark their territory by urinating very strong secretions that signal their presence. They can also shred tree bark. They cover their excrement with earth. They also pull the remains of prey to a thicket, hide them under leaves and return later.

It is equally difficult to follow his trail, because although the Bengal tiger is of imposing size, it is discreet and shy in nature. Thus, Bengal tigers cover their feces with soil and hide their killed prey in the middle of a bush. Sometimes they even cover it with dead leaves to be sure that no other animal will be able to taste it in their absence. Finally, you should also know that the Bengal tiger is the only feline to feed on meat at the beginning of decomposition.

## Reproduction

Bengal tigers reach sexual maturity at 3-4 years for females and 4-5 years for males. They usually breed in [the spring](https://fr.wikipedia.org/wiki/Printemps). A male from a nearby estate visits the female on his estate. During this period, the female is fertile only from 3 to 7 days. After mating, the male immediately returns to his own home range and does not participate in the breeding of the young. About 15 weeks later (95 to 112 days), the tigress gives birth to 2 to 4 pups, sometimes more, blind for the first 10 days. The mother breastfeeds them for 8 weeks and then also brings them small prey to eat.

At 6 months, she leaves them alone in the [den](https://fr.wikipedia.org/wiki/Tani%C3%A8re), for days, while she hunts. Older ones, she takes them with her. At 11 months they can hunt alone and at 16 months they are strong enough to prey on large prey. Young tigers stay 2 or 3 years with their mother; It is then ready to mate again. It can measure up to 2.80 meters.

# The giant panda

The giant panda is probably one of the most powerful symbols when it comes to species conservation. A national treasure in China, the panda has a special meaning for WWF, since it has been its symbol since its foundation in 1961. This peaceful member of the bear family, which feeds on bamboo, faces several threats. Its forest habitat is fragmented, and populations are small and isolated from each other. Not to mention poaching, which is a permanent threat to the panda.

In the 1980s, there were only 1,114 pandas in China. But the most recent censuses from 2014 reveal that there are 1,864 pandas living in the wild. Their population has increased by 17% in just one decade.

## Where can it be found?

The giant panda could once be frequently seen in southern and eastern China, as well as Myanmar and northern Vietnam. Due to population growth and extensive development activities, its range is now reduced to some 20 patches of isolated forest in the mountains in Sichuan, Shaanxi, and Gansu provinces.

The panda's habitat covers the Great Sichuan Plain. To the north are the Qinling mountain range and to the west are the Minshan, Qionglai, Liangshan, Daxiangling and Xiaoxiangling mountains.

## Avoiding the worst for the panda

After 30 years of slow but steady progress, the giant panda's status has now changed on the IUCN Red List of Threatened Species from endangered to vulnerable. The decision is a recognition of the work done over several years by the Chinese government, local communities, nature reserve employees and WWF.

## What does he eat?

The panda (which has a carnivorous digestive system but has adopted a vegetarian diet) depends almost exclusively on bamboo for its diet. Its daily menu therefore consists of bamboo leaves and stems in very large quantities (between 12 and 38 kg per day), since this plant has very little nutritional value.

## Life cycle

Giant pandas are generally solitary, with each adult having a well-defined territory from which it rarely exits. Contact is rather rare outside of the short mating season, but pandas still communicate with each other, usually by vocalization or scent marking.

It is often mistakenly believed that pandas have low reproductive potential. This misimpression is based on the poor reproductive performance of pandas in captivity. But wild panda populations that are the subject of longitudinal studies are known to have reproductive rates similar to those of some American black bear populations, which are very fertile.

# Great white shark

The **Great White Shark** is a species of shark in the family **Lamnidae** and order Lamniformes. It is the only current representative of the genus *Carcharodon*.

With a maximum size of more than 6 m long, it is one of the largest predatory fish currently living in the oceans. The population of great white sharks has declined by 75% in the Northwest Atlantic.

It is considered a dangerous shark since it is responsible for attacks on humans, the vast majority of which are non-lethal. Nevertheless, contrary to popular belief, it is not a "man-eater" and man is not a prey for it, most attacks being due to a visual analysis error of the shark. The great white shark has a very varied diet: pinnipeds, fish, sea turtles, cetaceans...

This type of shark is known to the public for having been the subject of Peter Benchley's bestseller *Jaws* and its film adaptation by Steven Spielberg.

## Vital statistics

The great white shark is on average 4 to 6 m long. At approximately 26 years, the age of sexual maturity, it measures 3.50 to 4.10 m. Mediterranean white sharks are more massive than their oceanic cousins. Females mature later, about 33 years old and measure 4 to 5 m.

The size of the largest specimen ever caught has been the subject of much debate, conjecture, and misinformation.

For decades, the Guinness Book of World Records, as well as the work of many ichthyologists, presented two specimens as the largest ever caught: one of 11 m caught in South Australian waters near Port Fairy in the 1870s, and one of 11.30 m captured in New Brunswick, Canada in the 1930s. Richard Ellis and John E. McCosker, in their book The Great White Shark (1991), dedicate an entire chapter to this subject. They conclude that the largest specimen ever captured and measured correctly must have been 6.40 m (measured flat on the ground and not suspended from a line) for 3,324 kg. It was caught in Cuba in 1945. The 7.13 m white shark, caught in 1987 in Malta, should only measure between 5.30 and 5.70 m according to experts.

Regarding unverified records over 10 meters, Richard Ellis, and John E. McCosker doubt the reliability of the measurements, noting that they were too large when compared to the very large white sharks that have been recorded. The 11.30 m white shark allegedly caught in New Brunswick (Canada) was misidentified because it was a basking shark, having a body similar in shape to the white shark. The issue of the Port Fairy 11m white shark in Australian waters was settled in the 1970s, when J. E. Reynolds examined the shark's jaws and concluded that it was only 5m long. He suggested that a mistake had been made in the original recording in 1870.

To conclude, the maximum size is estimated at 7.5 m long at most, by specialists such as the Italian Alessandro de Maddalena, but great white sharks over 6 meters are extremely rare. No great white shark reaching 7 meters has ever been caught.

The weight of the male great white shark varies between 680 and 2,000 kg. That of the female is between 1,000 and 1,900 kg. Ellis and McCosker write about the weight of white sharks and conclude that they can weigh up to 3 tons but also note that the heaviest weighed scientifically weighed 3.3 tons.

## Distribution and habitat

A great white shark near Guadalupe Island.

The habitat of the great white shark is mainly coastal in temperate waters, but it has also been observed in epipelagic zones in the ocean. It is a fan of shallow water, but one specimen was caught on a long line of 1,280 m. However, it likes to evolve in more than 30 m of depth, which explains, in part, why there are more attacks of this shark on the coasts where we reach great depths very quickly. It has a faculty of adaptation to very high temperatures. It can regulate its body temperature up to 20 ° C above room temperature, which explains its presence in sometimes relatively cold waters.

A cosmopolitan species, the great white shark is found in all temperate seas of the globe and sometimes even in tropical seas, probably following the migrations of whales that come to give birth. It is particularly present in Australia, South Africa, and California as well as in the Caribbean. The great white shark is also present in the Pacific Ocean, especially off the coast of Hawaii, from Japan to the Philippines, from New Caledonia to New Zealand. It has even been observed off the coast of Alaska. It has become rare in the Mediterranean Sea, a direct consequence of the intensification of commercial traffic between Europe and North Africa whose pollution was disturbing its habitat, according to a 2008 report by the NGO Greenpeace.

It most often travels alone or in pairs, but never in colonies. If it happens to observe the same specimen several years in a row in the same waters, territoriality has never been demonstrated. On the other hand, it seems that the largest animals sometimes make very long journeys. In 2005, a female great white shark, which was equipped with a location sensor, crossed the Indian Ocean round trip from Cape Town (South Africa) to the southern coast of Australia. That's a journey of nearly 10,000 km in less than nine months. Another crossed the South Island from New Zealand to the Great Barrier Reef. The reasons for such crossings are still very mysterious because there is no link with the migration of large cetaceans. A recent genetic study shows that specimens present in the Mediterranean arrived from Australia 450,000 years ago.

## Reproduction

Its reproductive cycle is not well known. It is estimated that the male reaches sexual maturity at 26 years and the female at 33 years. It is ovoviviparous: the eggs develop and hatch in the uterus of the female, with uterine cannibalism (like other lamnids). The gestation time is not yet known, because until now a mating of great white shark has never been observed. It is estimated between 12 and 18 months. The breeding period is 2-3 years. Young great white sharks, at birth, measure between 1.09 and 1.60 m and are already predators capable of surviving. They breed in the spring. Its life expectancy is estimated at more than 70 years.

Population growth is low, with an intrinsic rate of natural increase of 0.04 to 0.056.

## Feeding

The great white shark is rather solitary in nature, and it is rare for several individuals to gather to hunt. It sits at the top of the food chain in the ocean just below the killer whale. Due to its size, metabolism, and exceptional physical abilities, it has very few competitors, apart from the orca. It eats large fish (such as tuna, swordfish, or tarpon), sea turtles, seals and occasionally dolphins. The young feed exclusively on fish. According to the analysis of transmitters placed in their stomachs, great white sharks eat an average meal every three days, with a mass that is about 3% of their body weight. When prey is scarce, they can wait several weeks before feeding.

The rare cases of attack on humans are more considered as "accidents", mostly on surfers or windsurfers, an ovoid shape flapping "fins" on the surface and reminding this predator of its favorite prey. Its attack is divided into several phases: first the "teeth strike" that will bleed the prey, the great white shark does not swallow quarters of meat from a large prey on the first try. Then, when the prey is inert, then begins the actual feeding. Attacks on humans end in most cases after the teething. Indeed, during the bite, receptors located in the mouth "taste" the prey, which allows the shark to know if it is sufficiently rich in fat. Man does not bring enough fat for the shark; The shark does not recognize the taste of its prey abandons it, and the rare fatal cases result from hemorrhage (artery or limb severed). It is obvious that the pressure exerted by the jaw (more than fifty centimeters in diameter) and teeth sharp like razor blades leave an impressive, often disastrous, result on a human body.