

# Bear Facts

## General Information

### Sight

Bears have good eyesight and colour vision, which probably helps them to spot food such as coloured berries and fruits. Their eyes are widely spaced and forward facing, as in humans, which gives them binocular vision enabling them to judge distances well. As most bears are active at night, their eyes are specially adapted for night vision. Polar bears have a special protective membrane over their eyes, which may help shield the eyes from ultraviolet light, and help them see underwater.

### Hearing

Bears have better hearing than humans and, like dogs, are more sensitive to higher pitched sounds.

### Smell

Bears rely more on their sense of smell than any other sense. It is believed that this sense is even better developed than in dogs. They use smell to locate food, mates, to identify each other and their young, and to avoid danger. Bears are often reported to travel for several miles in a straight line to reach the carcass of an animal, which they have located through their acute sense of smell. In fact, polar bears have been observed smelling a seal more than 32 km away! It is also believed that bears can detect a human scent many hours after the person has passed by.

Bears use this keen sense of smell to communicate with each other. By leaving their scent on trees and vegetation, they are alerting other bears in the area to their presence.



### Touch

Little is known about a bear's sense of touch, but they are often seen delicately moving or touching objects with their nose, tongue, and claws.

### Behaviour

Bears are intelligent, have good memories and are curious animals, all qualities needed for their adaptation to a lifestyle where their habitat is large, varied and changeable with the seasons. They need to remember where a particular food source was found, what plants not to eat, where to find the best fish, and to learn quickly what to avoid – even human hunters.

Bears are usually solitary, coming together only briefly during the mating season. Under certain conditions where there are good food sources, such as salmon rivers, bears do gather and tolerate each other but they observe a strict hierarchy where the dominant bears get the best fishing sites.



## Bears of the World



Communication between bears is well developed and involves vocal and visual signals and also the use of smell. Bears are generally quite silent but use a variety of vocalisations when encountering other bears. Mother bears vocalise to their cubs, which respond with whimpering, crying, barking and even humming. Aggressive behaviour usually involves a direct stare and posturing, or displaying the size of their body - often by standing on hind paws. Roaring, displaying a wide-open jaw and exposing the teeth are also used in dominance displays. If displays fail, bears will fight and can suffer serious wounds. Bears also communicate their presence by scratching and rubbing scent markings on trees and use their sense of smell to find receptive mates for breeding.

### Hibernation

Hibernation is a state of inactivity and dormancy that some animals are able to undergo to enable them to survive the harsh winter period when there is a lack of available food.

Although we commonly say that bears hibernate, this is not strictly correct. True hibernators go into such a deep sleep that they are difficult to wake and may appear dead.

True hibernation takes place in many small mammals such as dormice, squirrels and chipmunks, where the animals store up fat reserves before the onset of winter and then go into a deep comatose state from which they are not easily aroused. Their metabolic rate and body temperature drop significantly during hibernation. In the ground squirrel, for example, the breathing rate drops from around 200 per minute to 5 per minute, and the heart rate from 150 to 5. Their body temperature drops from 32.2 degrees C to 4.4 degrees C (from 90 down to 40 degrees F), but if

the weather gets too cold, they will awaken to warm up, and then return to sleep.

Deep hibernators include: hedgehogs, woodchucks, marmots, dormice, squirrels, and some bats, frogs, toads and tortoises.

In habitats with harsh winters, bears go into a state of dormancy, where their body temperature and metabolic rate drops slightly, (from 102 degrees Fahrenheit to 95 degrees) but they can awaken and move around during their hibernating period, and may even go outside their den.

Bears can go three to six months without any food or drink during their "hibernation", and do not eat, drink, urinate or defecate during this time, but females give birth and nurse their cubs whilst they are hidden away from the world. A bear's winter sleeping heart rate is much lower; its breathing rate is 50%, and its oxygen consumption only 40%. Unlike many "true hibernators," bears can awake quickly at any moment during hibernation.

Not all bears hibernate however. Brown bears, American black bears and Asiatic black bears living in cold climates will hibernate. Those living in warmer climates, such as the giant panda, spectacled, sun and sloth bear remain active throughout the winter season. The reason for this is that hibernation is not simply a reaction for the animal to escape from the extremes of the winter; it is a physiological response to the seasonal disappearance of its normal food supply. In areas of the world where winter conditions are harsh, such as the more northerly parts of America and Eurasia, the bears' main sources of food - plants, berries, fruits etc. become scarce or disappear altogether.





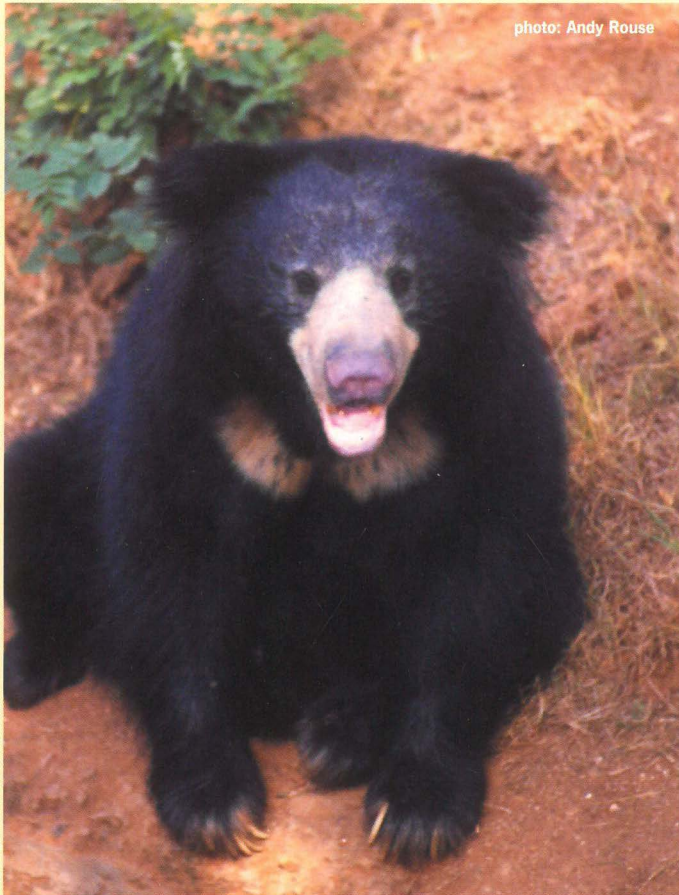


photo: Andy Rouse

In these areas during the autumn, bears fatten themselves by eating enormous quantities of food, often up to 20,000 calories per day! This is stored in the body as a layer of fat, which can be up to six inches thick. This stored energy will be slowly used up during its long sleep so that when the bear emerges after months in its den, it will have lost up to a third of its body weight.

Depending on the climate, bears can remain in their den for up to 7 months. It is no wonder that the American Indians believed the bears were 're-born' when they re-emerged from their den after so many months. Females with cubs tend to emerge from their dens later than other bears. In the polar bear's habitat, fish and seals are a constant source of food so the bears do not hibernate, despite the cold weather. Female polar bears do hibernate, however, if they are going to have cubs.

The dens where the bears secrete themselves away for the winter vary in design and location. They can either be in natural caves, hollows, under large boulders or even in old tree trunks, or the bear may dig a chamber in the ground. Polar bears dig dens into the snow. Bedding in the form of leaves and moss is dragged into the den to insulate it from the cold and to camouflage it. Sometimes bears use the same den year after year, while others find or dig a new one each time.



All bears can swim and all except the polar bear are good at climbing trees.

## Diet

Bears are omnivorous and tend to seek food from a variety of sources. Plants, fruits, nuts, berries, fish and carrion (dead animals) are eaten by many bears, but some are more specialist feeders. Polar bears are the most carnivorous bear, feeding mainly on seals. Sloth bears feed mainly on termites and ants, while giant pandas feed mainly on bamboo. All bears love honey and other sweet foods. Bears tend to eat what is available and in season.



photo: J. Clarke



# Bears of the World

## Reproduction

Female bears (sows) are able to start breeding when they are 3-5 years old, and usually give birth to between 1 and 3 cubs. At birth, bear cubs weigh around 300-400 g, except for the giant panda whose cubs weigh only around 140 g.

Cubs stay with the mother for 2-3 years before venturing off on their own. Male bears (boars) become sexually mature at around 3-5 years.

Bears generally mate in the late spring or summer, except for sun bears and sloth bears, which in some areas breed all year round.

Bears exhibit 'delayed implantation', ensuring that the fertilised egg does not implant in the wall of the womb until October or

November, after which it takes around two months to develop into a bear cub, which will be born in the den around January. The reason for delaying implantation is to ensure that the cub is born in the safety of the hibernation den. It also acts as a safety mechanism to ensure that the female can survive pregnancy; if there is insufficient food available in the autumn (fall) the female may not be in good physical condition to undertake the heavy nutritional demands of pregnancy and feeding a cub, and in this case the egg will not implant and be aborted.

Bear milk is very rich, having a fat content as high as 46% , compared to human milk at 4% . This rich milk allows the tiny, blind, and almost naked cubs to grow at a rapid rate.



photo: Sven Arnstein



# Bear Facts

## Threats to Bears

All eight species of bears are under threat all over the world – mainly from Man and Man's activities. The main threat is the rapid and continued destruction of their habitat, but bears are also caught from the wild for zoos and circuses, killed for their furs, meat, gall bladders and paws, farmed for their bile and used in cruel spectacles and sports such as bear-baiting and dancing bears.

### Habitat Destruction

As with so many other species around the world, loss of habitat through deforestation, human encroachment, and agriculture is having a massive detrimental effect on many bear populations. Without properly protected habitats, large enough in area to sustain viable population levels, many species of bear will simply not be able to survive in the wild.



Bears once lived throughout Europe but today the vast forests which once covered the land have been destroyed to make way for the growth of towns, cities and motorways as well as the vast agricultural fields. Brown bears were hunted to extinction in Britain's forests in the 10th century. In Western Europe these animals have disappeared from most areas. Spain, Greece and Italy have small remnant populations of individuals left – around 100 bears in each country. In France there are perhaps 6 brown bears left in the country – isolated in the southern area of the French Pyrenees.

Bears in Asia are threatened with massive deforestation of their habitat. In Indonesia, the logging and mining industries, and also increasing forest fires, are destroying thousands of square kilometres of prime forest habitat each year.

Polar bears live in the most inhospitable of areas – the ice packs of the Arctic, but even their habitat is under severe threat. This is mainly in the form of pollution from oil spills resulting from the massive oil exploration being undertaken in that region of the world. There is also a growing threat from global warming which is slowly warming the northern ice packs and gradually melting the

ice from beneath the paws of these bears, which have adapted to their particular icy lifestyle.

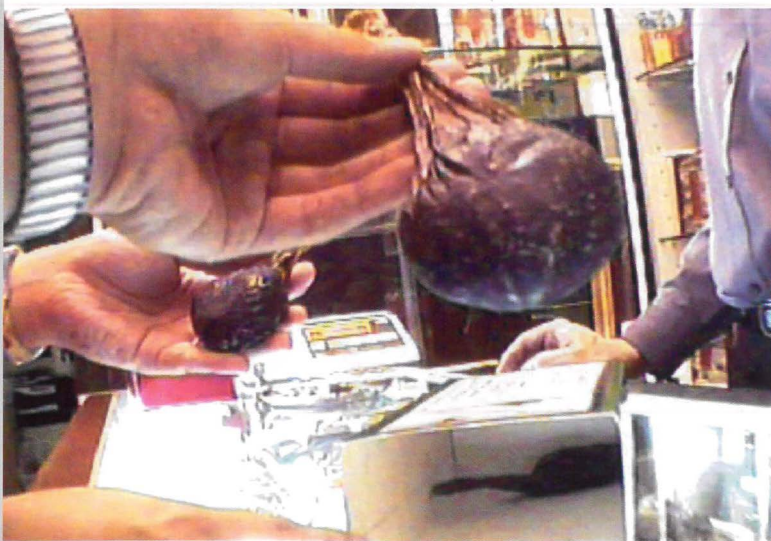




## Bears of the World

### Trade in Bear Products

The illegal trade in bear parts is common in many Asian countries. High prices can be fetched for parts such as gall bladders, which are used in Traditional Chinese Medicine (TCM) because of its supposed medicinal properties. Bear teeth and claws are sold as trinkets and various parts of the bear are sold as food delicacies. There is also a huge demand for bear bile which is met by the killing of wild bears and by a practice known as bear farming. Bears are kept in cramped cages, hardly big enough for them to turn around in, and have bile extracted daily through a tube inserted into an opening made directly into the gall bladder. This incredibly cruel practice is most widespread in China and leads to severe distress and pain for the bears.



### Dancing Bears



The life of a dancing bear begins early on as cubs are poached from the wild or bought from disreputable zoos. Forced to undergo a brutal training regime, the cubs have their nose or lips pierced with a thick iron ring on a chain. From that day on, the bears are slaves to the whim of their owners, with the slightest movement of the chain causing them agony and enabling their owners to make them perform a grotesque dance in a desperate effort to avoid the pain of the chain. The cubs may also have had their teeth and claws removed to make them easier to handle, and as a result they can never be returned to the wild.

### Bear Baiting

Bear baiting was made illegal in most countries over 100 years ago but this cruel practice still persists today in Pakistan. WSPA's first investigation in Pakistan, undertaken in 1993, found evidence





of 80 different contests involving 300 bears. The setting of fighting dogs against bears inflicts appalling suffering on both animals. Of all the ways in which bears are mistreated around the world, the medieval sport of bear baiting must be one of the most barbaric and obscene.

## Hunting

Reasons for hunting vary. In many parts of the world, bear hunting is regarded as a sport in itself, with the body of the bear being a much sought after 'trophy'. In other countries it is the bear's body parts that fuel hunting activities. Bears are hunted for their meat, their gall bladders and bile, and for body parts such as the feet and claws, which fetch high prices on the black market. In many rural areas the bears are regarded as pests and a danger to farmers and their families and many bears are unnecessarily killed as a result. Adult females are often shot so that their cubs can be taken and sold as pets and tourist attractions - never to return to the wild.



## Zoos and Circuses

Bears are regularly used in circuses and animal shows to entertain the public. When the bears are not performing degrading tricks for the audiences, they are kept in cramped cages travelling from one town to the next. Bears are also very common in zoos and animal parks where living conditions are often extremely poor. Bears often languish for years in barren enclosures with little or no environmental enrichment. It is sad to see that many zoos have no understanding of the needs of animals such as bears. In the wild these animals would roam over many miles each day, climbing trees, digging for insects, catching fish in rivers, but in many zoos all they have is a small concrete enclosure. In Japan this is taken to the extreme in their "Bear Parks" which often have 50 bears in each concrete pit. With nothing to occupy them these animals frequently end up fighting and receiving serious wounds. The only way to stop this cruelty is to educate the public as to the true needs of bears.