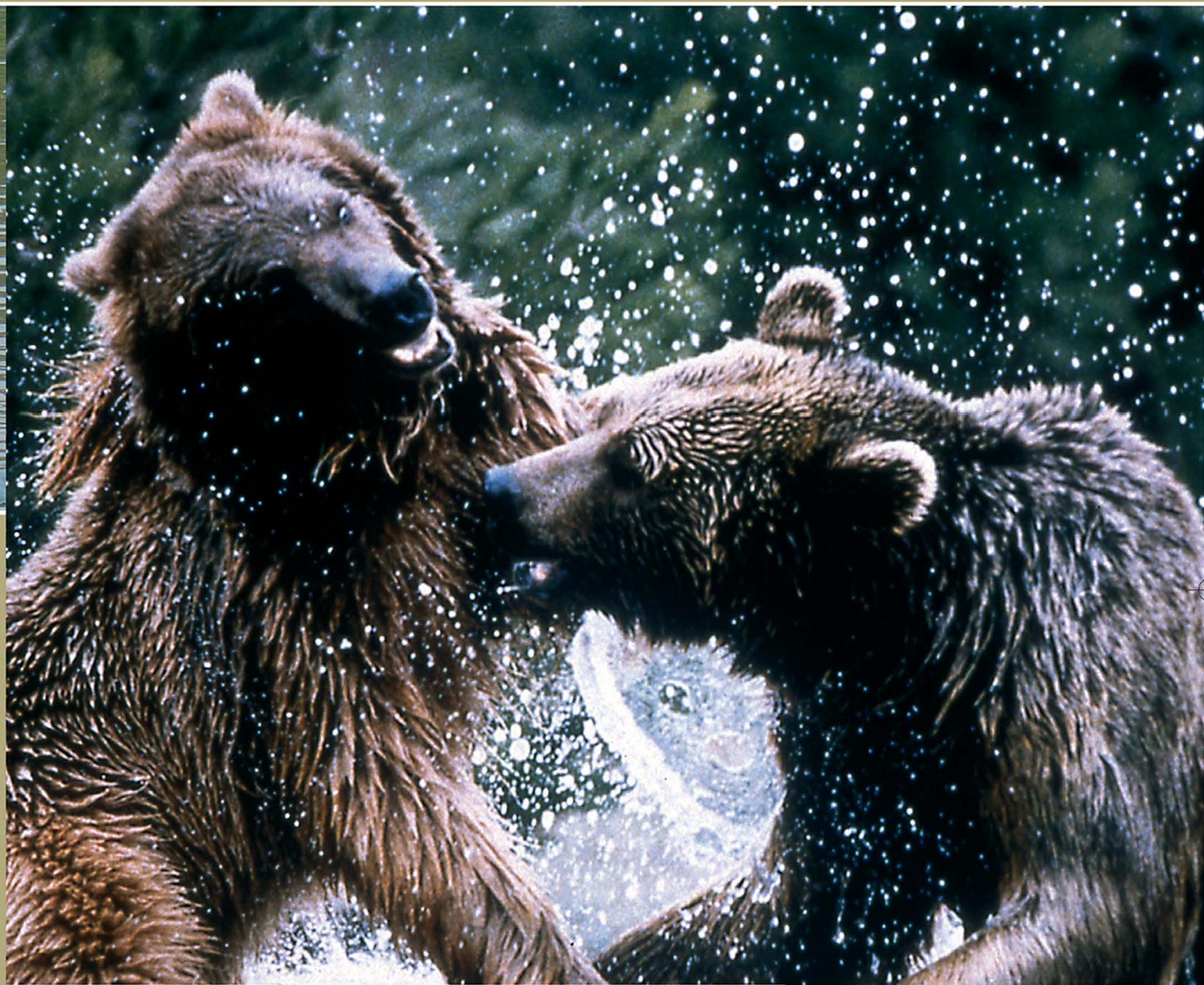


Bears of the World

# BEAR FACTS



[www.feherkeresztliga.hu](http://www.feherkeresztliga.hu)



BETHLEN GÁBOR  
Alapkezelő Zrt.







# Bears of the World

## BEAR FACTS

### CONTENTS

#### Bear essentials

Sight	5
Hearing	5
Smell	5
Behaviour	5
Hibernation	6
Reproduction	7

#### Threats to bears

Habitat destruction	8
Trade in bear products	8
Dancing bears	9
Bear baiting	9
Hunting	9
Bear-human conflict	10
Zoos and circuses	10

#### Bear safe

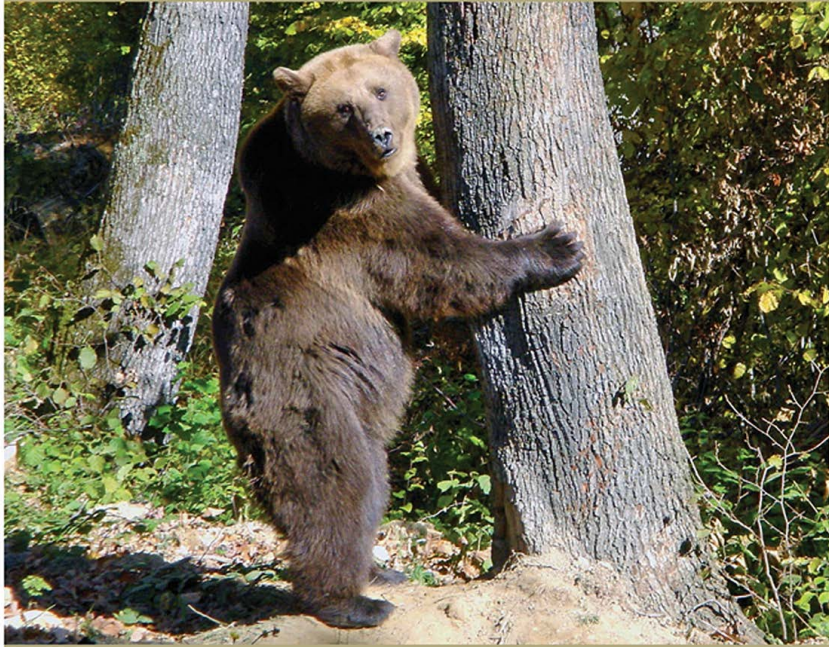
Bear encounters	11
Camp set-up	12
Cooking	12
Food storage	12
Garbage disposal	12

#### Bear quiz

Question sheet for copying	13
----------------------------	----

The world's best	14
Travelling tips	14
Useful words	15





**B**ears were once common throughout many parts of the world. Today, all eight species of bear are under threat – mainly from human activities.

Bears are intelligent and curious animals that have adapted well to live in some of the most inhospitable areas of the world. Despite this, conflicts and exploitation by humans have reduced the numbers and distribution of many species by more than 50% over the last 100 years.

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 fur, meat, gall bladders and paws; farmed for their bile; used in cruel bear dancing shows and for bear baiting.

As the world's largest federation of animal welfare organisations, WSPA works to promote the protection, the prevention of cruelty and to relieve the inhumane treatment of animals in every part of the world. In 1992 WSPA launched LiBEARty, the world campaign for bears. It aims to save and protect bears from cruelty in the wild and in captivity.

By continuing to provide information and educational material, such as this booklet, WSPA aims to promote a better understanding of bears and the cruelty and threats they face. As global awareness of the plight of bears increases, so too will a global commitment to end the damage to and suffering of these sensitive and intelligent animals.



# BEAR ESSENTIALS

## SIGHT

Bears have good eyesight and colour vision, which 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 bear eyes have a special protective membrane, which may help shield them 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 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,

and also to avoid danger. Bears are often reported to travel for several kilometres in a straight line to reach the carcass of an animal, which they have located through their acute sense of smell. Polar bears have been observed to smell a seal more than 32 kilometres 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.

## BEHAVIOUR

Bears are intelligent, have good memories and are curious animals; all qualities needed for 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 – this includes 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 gather and tolerate each other. They observe a strict hierarchy where the dominant bears get the best fishing sites.



European brown bears in natural habitat





Asiatic black bear in natural habitat

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 also call 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 and displaying a wide-open jaw which exposes the teeth are also used in dominance displays. If displays fail, bears will fight and can suffer serious wounds. Bears also use their sense of smell to find receptive mates for breeding.

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

## 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 food.

Although we often 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. Animals store up fat reserves before the onset of winter and then go into a deep comatose state from which they are not easily roused. 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 five per minute, and the heart rate from 150 to five. Their body temperature drops from 32.2 °C to 4.4 °C, but if the weather gets too cold, they will awaken to warm up, and then return to sleep. True 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. Their body temperature and metabolic rate drops slightly, but they can awaken and move around during their hibernating period, and may even go outside their den. Body temperatures only drop by 2–6 °C.

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. Females can, however, give birth and nurse their cubs while they are hidden away from the world. Females with



cubs tend to emerge from their dens later than other bears. A bear's winter sleeping heart rate is much lower; its breathing rate is 50%, and its oxygen consumption only 40% of normal levels.

Not all bears hibernate. Brown bears, American black bears and Asiatic black bears living in cold climates will hibernate but those living in warmer climates, such as the Giant panda, Spectacled, Sun and Sloth bears remain active throughout their winter season. The reason for this is that hibernation is not simply a means 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 where winter conditions are harsh, such as the more northerly parts of America and Eurasia, the bears' main source of food – plants, berries, fruits etc. – becomes scarce or disappears altogether. 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. 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 when a bear emerges after months in its den it may have lost up to a third of its body weight.

The dens where the bears hide 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. A bear may even dig a chamber in the ground. Polar bears dig dens in the snow. Bedding – leaves and moss – is dragged into the den to insulate it from the cold and to camouflage it. Some bears use the same den year after year, while others find or dig a new one each time.

## REPRODUCTION

Female Polar bears (sows) exhibit delayed implantation, which ensures that the fertilised egg does not implant in the wall of the womb until October or November. It then 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 but 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. In this case the egg will not implant but 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, almost naked cubs to grow at a rapid rate.



(left): Natural bear den  
(right): European brown bear resting





# THREATS TO BEARS

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

All eight bear species are listed in either Appendix I or II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). CITES is an international agreement to which over 160 countries have signed up. It was established in 1973 to control the trade in endangered wild animal and plant species. Species are listed in three appendices, according to the level of threat. Species listed in Appendix I receive the greatest level of protection from international trade, while those in Appendix II and III receive lower levels of protection. Please see the CITES website for further information ([www.cites.org](http://www.cites.org)).



Destroyed bear habitat after forest fire

## 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 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 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 vast agricultural fields. Brown bears were hunted to extinction in Britain's forests in the 10th century and in Western Europe these animals have disappeared from most areas. Spain, Greece and Italy have small populations left – around 100 bears in each country. In France there are only a handful of Brown bears left, 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 industry and 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 the region. There is also a growing threat from climate change which is slowly warming the northern ice packs and melting the ice from beneath the paws of these bears.





Asiatic Black bear in Chinese bear bile farm



Bear bile products



Bear baiting



bear bile farmed in China is sold illegally abroad in many countries in Asia and the West.

### 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

Dancing bear in the streets of India



### 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







(above): Japanese bear park enclosure  
(top right): Brown bear in a zoo  
(right): Circus show

as the feet and claws, which fetch high prices on the black market. Adult females are also 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 also very common in zoos and animal parks where living conditions are often extremely poor. Bears languish for years in barren enclosures with little or no environmental enrichment. Many zoos have no understanding of the needs of animals such as bears. In the wild these animals would roam over many kilometres each day, climb trees, dig for insects and catch fish in rivers whereas in many zoos all they have is a small concrete enclosure. In Japan this is taken to the extreme in the '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. Bears are also 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. The only way to stop this cruelty is to educate the public as to the true needs of bears.



# BEAR SAFE

An increasing number of people are living or holidaying in bear country. But many people do not know how to live safely with their wild neighbours. A bear is quickly labelled a nuisance or a pest when it is attracted by the smells of our food and rubbish. All too often, the problem is solved by killing the bear. But curious bears can be discouraged from looking for an easy meal. Carelessly stored food, rubbish, even pet food, can all attract bears, making them a potential problem. By eliminating the source of the attraction, we can eliminate visits from 'nuisance' bears – and keep other bears from becoming a problem in the future.

Bears are opportunistic omnivores that feed on a variety of foods, including berries, vegetation, and insects. Some species eat meat, as well as fish. Bears will also eat and enjoy many of the same foods humans eat.

Bears are wild animals, and should not be approached if you encounter them in the wild.



Wild bears feeding in garbage bins

Contrary to popular perception, bears are not usually aggressive towards humans and, will try to avoid humans as much as possible. They are naturally shy and typically only act aggressively when threatened. However, hungry bears may appear if lured by the smells from a barbecue or rubbish bin. They will remember an easy source of food and will keep returning if the food source is not disposed of properly.

A bear's sense of smell and hearing are far superior to that of humans, and their eyesight is at least as good.



## Humans and bears can live together

Encounters with aggressive bears are extremely rare and attacks are even rarer. Female bears only rarely attack defensively and are most likely to try and warn you off or escape and collect their cubs later, but it is best to stay away from all cubs even if they are alone. The mother is probably nearby. A bear that has reared on its hind legs rarely attacks – they generally attack on all fours. A bear standing on its hind legs is usually trying to catch your scent or trying to get a better look at you.

There is no foolproof way of dealing with a bear encounter (each bear and encounter is different) but the best approach is to play it safe.

- **DO NOT approach it.**
- **DO NOT leave food for the bear** as this encourages further problems. If you see a bear, remain watchful.
- **DO NOT run, but slowly back away.** Being too close to a bear may promote aggressive behaviour from the bear. This includes running towards you, making loud noises, or swatting the ground. If the bear gets closer, talk loudly or shout at it.
- **DO NOT act aggressively but, if the bear approaches you, try to intimidate it.** Act together as a group if you have companions. Make yourself look as large as possible (for example move to higher ground). Throw non-food objects such as rocks at the bear. Use a deterrent such as a stout stick.



Despite their somewhat lumbering appearance, bears are fast and are also extremely strong. Asiatic black bears, for example, can run as fast as a racehorse over short distances. Bears have been known to bend open car doors and break open windows when they can smell food.

### Camp set-up

Camping next to a river or stream makes it hard for bears to hear you. Avoid setting up camp near natural bear food sources. Stay away from abundant food sources (e.g. berry bushes) and dead animals – bears may be foraging in the area or protecting a carcass.

### Cooking

Be alert when cooking food outdoors. If bears are nearby, they may be attracted by the smell. Cooking areas should be well away from your tents (at least 100 metres downwind).

### Food storage

Food should be stored in a vehicle or placed in several layers of plastic bags and suspended between two trees around seven metres apart at least three to five metres above the ground (and 100 metres away from your camp). Remove the clothes you wore while cooking before going to sleep, as they may smell of the food, and store them in a vehicle or hang suspended with your food. When camping, don't bring food into your tent – this includes toothpaste, perfume and chocolate bars. Burn food scraps and wash all dishes immediately after eating.

### Garbage disposal

Don't leave food, rubbish or pet food outside where bears will smell it. Store rubbish indoors, outside in bear-proof containers or suspended between trees (see food storage above).

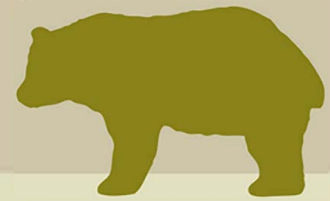
## QUIZ ANSWERS

- 1 Brown bear (see species fact sheet for distribution)
- 2 Giant panda. Endangered due to deforestation in their bamboo habitat.
- 3 Largest: Polar bear. Smallest: Sun bear.
- 4 Africa and Australia.
- 5 Fore paws have webbed membranes to assist swimming. Thick layer of subcutaneous fat protects against freezing temperatures. Small ears protect against excess heat loss. Soles of feet are padded with fur and covered by small, soft bumps known as papillae, which give a better grip on the ice.
- 6 Long powerful claws to break open termite mounds. Naked lips are capable of protruding, and the inner pair of incisors are missing, which forms a gap through which termites can be sucked.
- 7 They have six digits on front paws. This is developed from the wrist bone, and is used as an opposable thumb by which the bear can grasp bamboo shoots when feeding.
- 8 Moon bear. They have a distinctive white patch on the chest, which is often in the shape of a V or a crescent.
- 9 Spectacled bear. Mainly found in fragmented small populations in the Andes Mountains in Venezuela, Colombia, Peru, Ecuador and Bolivia.
- 10 Alaska, Wyoming, Montana, Idaho and Washington. Other countries include: Russia, Japan, Greece, Italy, Spain (see species fact sheet map for full distribution).
- 11 A state of inactivity and dormancy. Brown bears, American black bears and Asiatic black bears hibernate as a physiological response to seasonal disappearance of normal food supply.
- 12 They feed on a mixed diet of plant and animal material. Bears eat: plants, fruits, nuts, berries, fish, meat and carrion. Giant pandas eat the shoots, leaves, stems and branches of around 30 species of bamboo. Deforestation of bamboo habitat affects panda survival in wild.
- 13 Habitat destruction. Trade in bear products. Use in entertainment (dancing bears, bear baiting, circuses and zoos). Hunting. Human-bear conflict.
- 14 a) Pollution due to oil exploration, potentially toxic chemicals such as PCBs in Arctic environment and climate change shortening hunting season with ice breaking up earlier. b) Habitat loss through deforestation, human encroachment (growth of towns, cities and motorways), and agriculture reduces areas available for bears to live so populations become fragmented.
- 15 Include: capture from wild, inadequate housing (small, lacking in adequate environmental enrichment), poor diet, overcrowding, cruel training methods etc.



# Bear Facts!

## QUIZ & ACTIVITIES

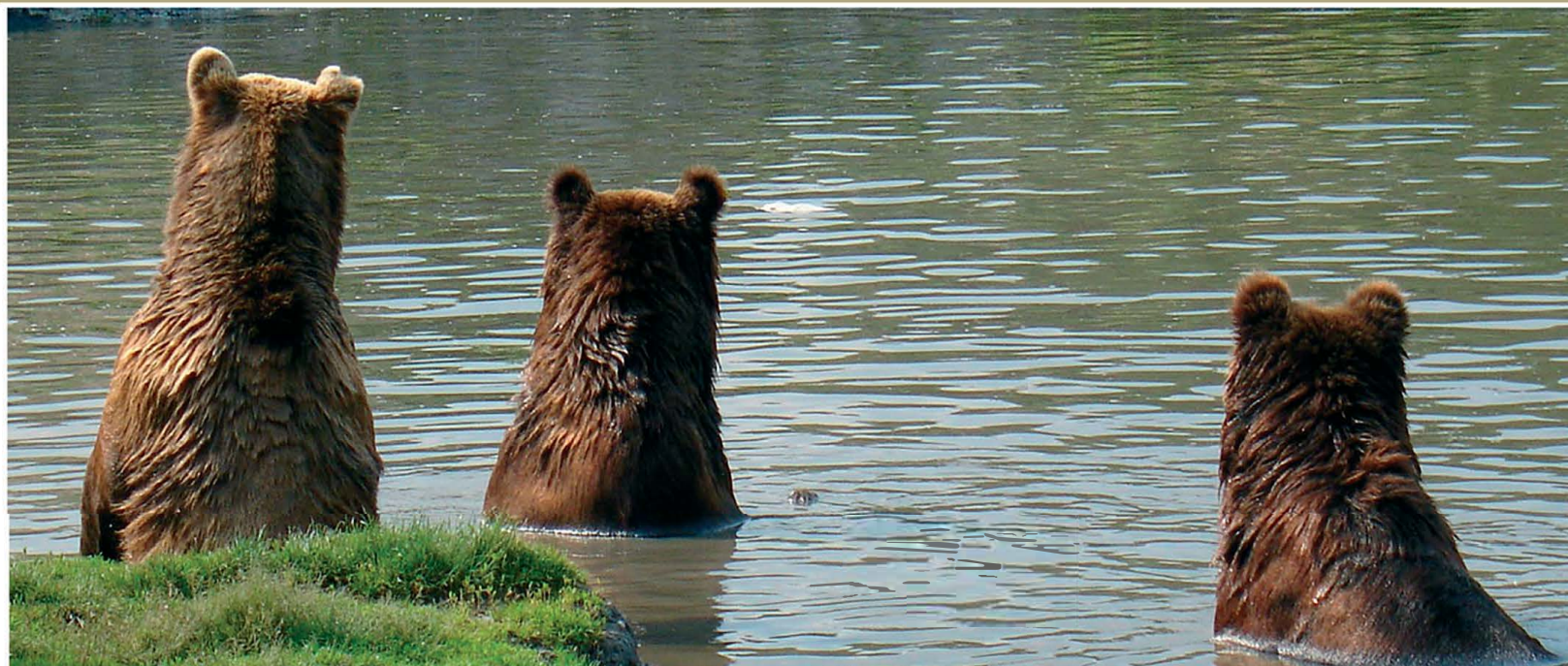


- 1 Which bear species has the most widespread distribution?
- 2 What is the rarest species of bear and why are there so few of them?
- 3 Which is the largest species of bear in the world and which is the smallest?
- 4 Which continents do not have any bears?
- 5 Describe three ways Polar bears are adapted to living in their environment?
- 6 What specialised features have Sloth bears evolved to cope with their diet?
- 7 What is unusual about the front paws of the Giant panda?
- 8 What is the other name for the Asiatic black bear and how did it get its name?
- 9 Which is the only bear to inhabit South America and in which countries can it be found?
- 10 In how many USA states can you find the American Black bear? In which other countries can it be found?
- 11 What is hibernation? Which bear species hibernate and what is the main reason for this?
- 12 Bears are omnivorous. What does this mean? Name some of the foods that bears eat. Which bear has the most restricted diet and how might this affect its survival in the wild?
- 13 List five threats to bears worldwide.
- 14 Many bears are threatened by habitat destruction, how does this threat affect:
  - a) Polar bears
  - b) Brown bears in Europe?
- 15 What are the main welfare concerns for bears kept in captivity in zoos and circuses?

- Using the world map provided (and any atlas available to you) list, for each bear species, the countries where they can be found.
- Using information provided here, and in other books, write a detailed account of the life of one species of bear.
- Write an account of bear farming (for bear bile) and the illegal trade in bear products. Use the information provided or check WSPA website ([www.wspa-international.org](http://www.wspa-international.org)).
- Design a 'bear safe' poster, which could be used to inform the public living or holidaying in bear country.
- Imagine you are a bear in any one of these situations:
  - a) a dancing bear
  - b) a bear in a bear bile cage
  - c) a bear in a circus or zooWrite an account of a day in the life of such a bear.
- Carry out the following role-play exercise: you are taking part in a radio or TV discussion programme on the subject of bear farming. One person each needs to take the part of:
  - a) a bear bile farmer
  - b) a government spokesperson
  - c) a TCM (traditional Chinese medicine) trader
  - d) an animal welfare investigator
  - e) the interviewerEach person will need to be able to defend his or her position in the debate. The rest of the class will be the studio audience.







[www.feherkeresztliga.hu](http://www.feherkeresztliga.hu)

