



Life on LAND

— STRUGGLING TO SURVIVE





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STRUGGLING TO SURVIVE

Life on
LAND

Dear Students,

I am sure, by now, you are familiar with the definition of biodiversity - it is all about the variety of life that exists on this Earth. But did you know that scientists estimate that around 5 to 100 million species of organisms call it home? From these, we have only identified 2 million species so far!

The United Arab Emirates is located in a hot arid desert - one of the most fragile ecosystems in the world. Here, the plants and animals are heroes. They are trying to survive against all odds. However, despite the harshest of conditions, the country still manages to support an impressive 800 species of plants, 64 species of terrestrial and marine mammals, 67 species of reptiles and 430 varieties of bird species.

However, as tough as these species are, they still face severe threats. Species extinction around the world is on the rise - 1 out of every 8 birds, 1 out of 4 mammals, 1 out of 3 amphibians, and 75 per cent of the world's fish are under threat. With 31 per cent of the world's forests gone, there is a scarcity of resources provided by forests, such as food and medicine. This also means that animals are losing a safe habitat.

Biodiversity is closely linked to what we breathe, eat, drink and even wear. It is so important to our existence that in fact that we cannot afford to sit around and watch as these species and habitats are being lost. They are vanishing because of many reasons such as pollution, contamination, introduction of alien species and climate change. WE humans played and continue to play a large part in the reasons behind these problems and so WE need to come up with the solution, without further delay.

Protecting our natural heritage and conserving biodiversity is one of our priorities at the Environment Agency - Abu Dhabi. We strongly believe in raising environmental awareness and promoting environmental education. We have already reached out to hundreds of thousands of students, just like you, through our educational programmes. However, this series, developed jointly with TERI - The Energy and Resources Institute, will help us reach even more students to raise their awareness about species around the world, including in the UAE, whose lives are in danger.

I hope that you enjoy reading this series and it helps you to better understand what plants and animals are facing on Earth. Help spread the message far and wide, so that others can also start protecting and conserving our precious biodiversity.

Razan Khalifa Al Mubarak
Secretary General
Environment Agency - Abu Dhabi



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Introduction

Terrestrial animals and their characteristics: The word “Terrestrial” comes from the Latin word *terrestris*, and it is also related to the Old French word *terrestre*. It is an adjective, which means earthly or relating to Earth. Now I guess you can understand that we terrestrial animals are earthlings from the land. But, then how do we describe ourselves, is what you might ask. Let us put it this way. We live on land. You can find us in forests, caves, mines, grasslands, trees, deserts, shorelines, wetlands, farms, towns, and cities. But we can't live in water like aquatic animals do. You can include cats, rats, ants, monkeys, tigers, and so on, in our family. While herbivores like cows, goats, monkeys, camel, and sheep love to eat grass and leaves, ants and cockroaches can survive on all kinds of organic matter. Some of us are carnivores like foxes, lions, and wolves that eat other birds and animals to live!

Why we are important: We help in balancing the ecosystem, as we are an important part of the food chain. Some of us are a source of food for other animals, while some are predators. Flies and bees help in pollinating, thereby helping plants to bear fruits. The plant kingdom is also dependent on us for seed dispersal. Some plants develop seeds with hooks, which attach with our paws, fur, boots, and feathers and later become trees or plants wherever they drop from our bodies. Some of us provide shelter to other species of animals too.

Threats to us: Did you know that change in weather and climatic conditions are posing a threat to our habitat. The Polar bears are losing their home – the ice-clad regions of the Arctic – due to global warming. As there are not enough forests for us, we sometimes get confused and end up in towns and cities, where we are killed or captured and caged. Some of us have shorter hibernation cycles and disturbed migration cycles now. If the Earth continues to warm up, one-fourth of us could become extinct within 100 years. And human-induced issues like hunting and poaching are also a potent threat to us.

Terrestrial animals in the United Arab Emirates (UAE): These include the sand gazelle, mountain gazelle, Arabian oryx, jerboa, Arabian tahr, Arabian leopard, white-tailed mongoose, sand fox, striped hyaena, sand cat, hedgehogs, pygmy shrews, rock rabbit, Cape hare, and many more. Land animals in the UAE have found a clever way to survive in the harsh climate. For example, the largest of Arabian antelopes, the Arabian oryx, are capable of living in areas without trees or standing water. They are able to utilize the moisture in their food, and their kidneys are also adapted to conserve water.

Did you know?

- A dog's sense of smell is 1,000 times stronger than that of humans.
- Polar bears are the only mammals with hair on the soles of their feet.
- Cheetahs are the only cats in the world that can't pull back their claws.
- Large kangaroos can cover over 30ft with each jump.
- A rhino's horn is made of hair.
- No two zebras have the same markings.
- Rabbits do not occur in Arabia.



Arabian tahr

Know all about me!

I am the smallest in the tahr family. My Asian relatives – the Himalayan tahrs and Nilgiri tahrs – are bigger than me. You can find me either in the Hajar Mountains or Jebel Hafit of the United Arab Emirates and the northern parts of Oman.



Did you know?

Unlike other species of tahrs, the Arabian tahr is solitary or lives in small groups consisting of a female and a kid, or a male.

Guide to identification

I have horns pointing backwards. However, the horns of male tahrs are larger and denser than those of female tahrs. I have long and reddish hair with a dark brown stripe running down my back, from the head to the tail. My rubbery hooves help me get a good grip on the mountain areas.

Bio Weight: 40kg (male), 17–20kg (female); Lifespan: 15–17 years



I call it “home”!

We male tahrs mark our own space by drawing our boundary. We first scratch our hooves on the ground and then urinate. We like to live in spaces, which remain sheltered from sunlight, contain water and vegetation, and have cooler temperatures. We love to eat leaves, fruits, and seeds of a range of trees, shrubs, and grasses. So when our areas run out of water supply and food, we temporarily go away in search of food and water.



The presence of tahrs is important for Arabian leopards, as they prey on tahrs. The number of Arabian leopards is less than 250 in the wild.

Can you save me?

I am afraid of being hunted for sport and meat. It is illegal, as our population is very small – less than 2,500 tahrs. Besides hunting, a big reason for our disappearance is loss of habitat. Domestic goats now forage in places that once belonged to us, while some of our other homes have now turned into roads and buildings. Not only this, diseases spread by domestic animals have also affected our population. Increased mining is another threat to our habitat and water availability.

Protected areas for us

Wurrayah in Emirate of Fujariah is a protected area for us. The Nature Conservation Centre, Al Ain, houses a good number of Tahrs at present. In 2005, its Tahr population was only 10.



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Asian elephant

Blast from the past

In the early twentieth century, American and European girls wore bracelets made of ivory and elephant hair for good luck.

Here comes the trunk!

I have a gigantic head with small eyes and a long snout called the trunk. Made up of a hundred thousand muscles, the trunk is the most sensitive part of my body. But it is also very powerful. It can pluck a tree from its roots and carry hundreds of kilos of weight.

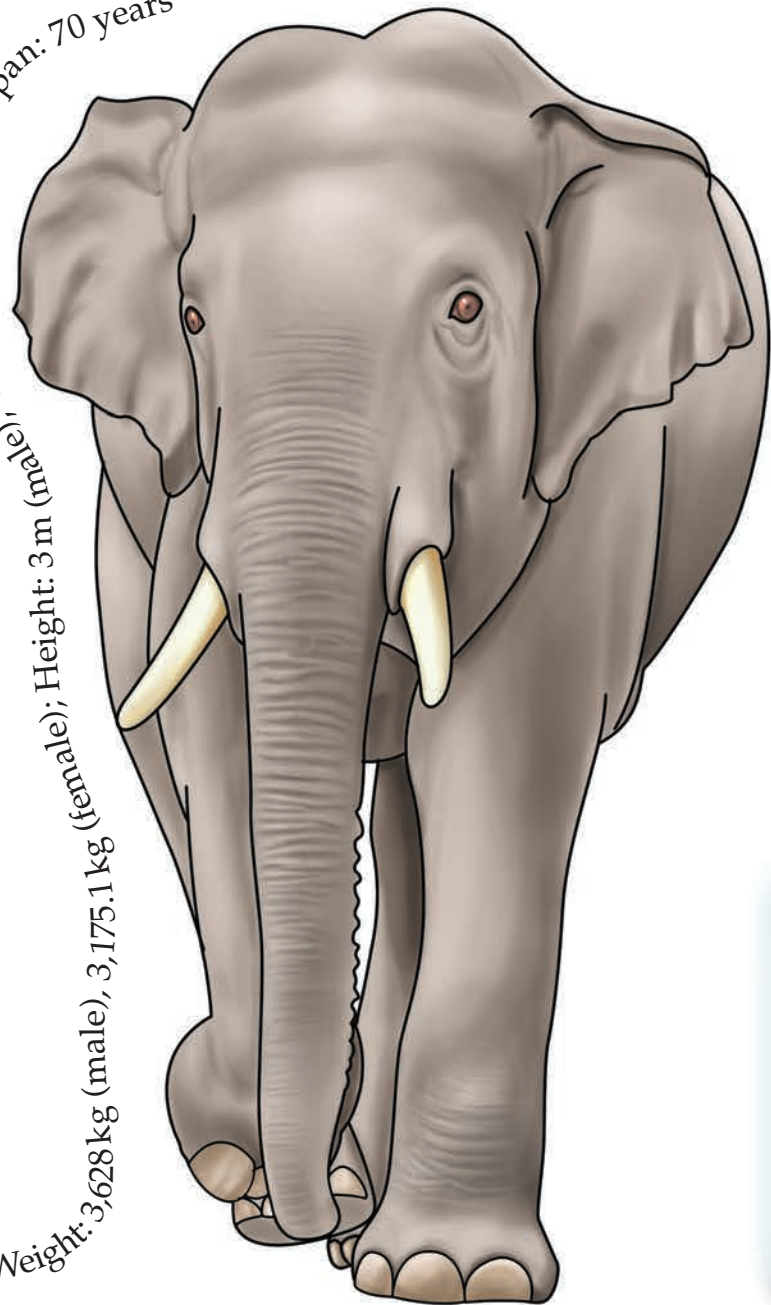
The gentle giants

I am the largest living land animal. I eat more than three hundred tonnes of food per day. I also need a lot of water. So, I dig water holes. These are used by other animals, too, after my friends and I have drunk water to our fill.

Our African counterparts

African elephants are the largest of Earth's land mammals. Their enormous ears help them to keep cool in the hot African climate. They are slightly larger than us. Just like us, they are also killed for their tusks. As a result, they are endangered too.

2.4 m (female); Lifespan: 70 years



Weight: 3,628 kg (male), 3,175.1 kg (female); Height: 3 m (male)

Bio

The disappearing elephants

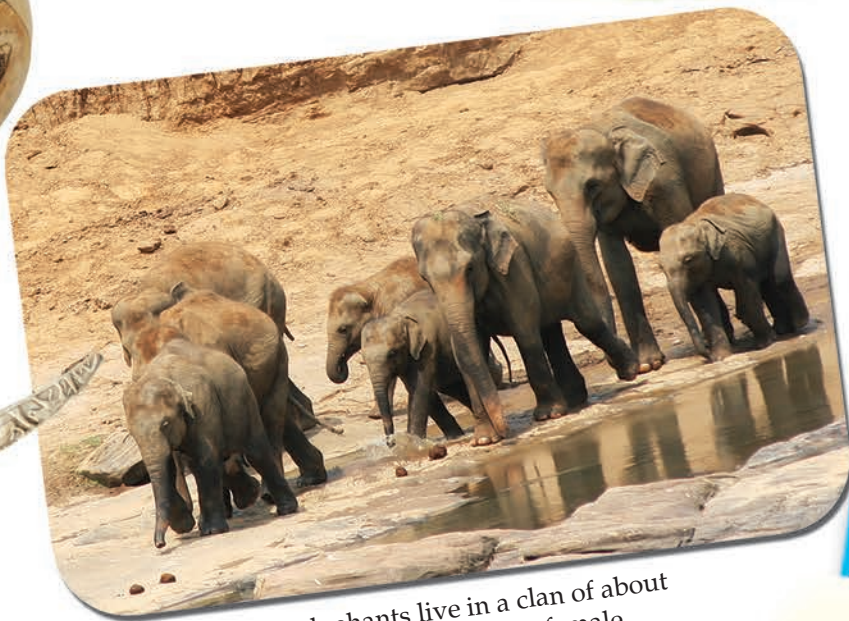
Humans have been using us as beasts of burden for the last 4,000 years. My home is also being snatched away by humans. What is more, I am being killed for my tusks! Only 25,000–32,750 Asian elephants survive today.



Elephant tusks are taken away and sold in the market for millions of dollars.

Did you know?

Elephants cry and have long-lasting memories. They also welcome new friends with a ceremony.



Asian elephants live in a clan of about seventy members, led by a female.

I am large and grey. I have big flapping ears and long, white tusks made of ivory. I am an Asian elephant. I only eat plants and loads of them. That is why I need huge open spaces, where I can roam freely and can get lots of food!

Can the tusker be saved?

I can be conserved in sanctuaries and protected areas. These are places where I can live and graze without fear. Local people need to take steps to save me. After all, we must learn to live together peacefully!

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Bison

Wild but harmless

Both male and female members of my family have horns. These horns are cap-like coverings on bony growth. I have two layers of hair on my body. There is a thin inner layer of soft, fine hair and another outer layer of rough, thick hair. I shed hair in the spring season, but as winter approaches, I grow a new dark brown coat!

Did you know?

Bison calves are on their feet within 30 minutes of their birth and start running within an hour.



Bio Weight: 907.1 kg (male), 408.2 kg (female); Height: 1.8 m (male), 1.37 m (female); Lifespan: 12-15 years



I am large... really, really large. I look like a very big cow or buffalo, but I am neither. I am a bison. I live in the grasslands and mountains of America, Canada, and Europe.

I have the stomach for it!

I love the company of my friends and family. I live in large herds of up to 40 members. I mostly eat grasses, small plants, shrubs, and twigs. These contain a lot of fibre. All this fibre would have upset my tummy if it weren't for my unique digestive system. Like the cow, I too have four chambers in my stomach, which help me digest my food properly.

There were 60 million bison in North America when explorer Christopher Columbus first set foot there in 1492.



Blast from the past

Earlier, Indians living in plains depended heavily on bison for food and livelihood. In the late 1800s, the government encouraged the slaughter of bison to destroy the Indians' bison culture.



Bison meat was part of the daily diet of Indian tribes. They also traded in bison hides.

Lost and found

There was a time when we could be spotted in big herds. Then we began to be hunted for our hides or simply for sport! In America, our numbers reduced from almost 40 million in the 1800s to about 600 by the 1900s!

Measures for life

In 1875, William Hornaday, a zoologist, predicted that we would become extinct in 20 years. This made people realize that by killing us they were losing a precious symbol of the wilderness. In Europe, we have been brought back from the brink of extinction because of conservation efforts, mainly breeding in zoos.

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Bactrian camel

I am a camel with two huge humps on my back! I am the Bactrian camel! I am found in the Gobi Desert. I can withstand droughts, shortage of food, and even nuclear radiation, yet I am critically endangered.



Bio Weight: 750 kg (male), 650 kg (female); Height: 2.1 m (male), 1.74 m (female); Lifespan: 50 years

The great adapter!

I have adapted well to the barren and harsh expanse of the Gobi Desert. I have a double row of eyelashes and hair in my ears, which protect me from the sand. My long nostrils allow me to breathe even during sandstorms!

Blast from the past

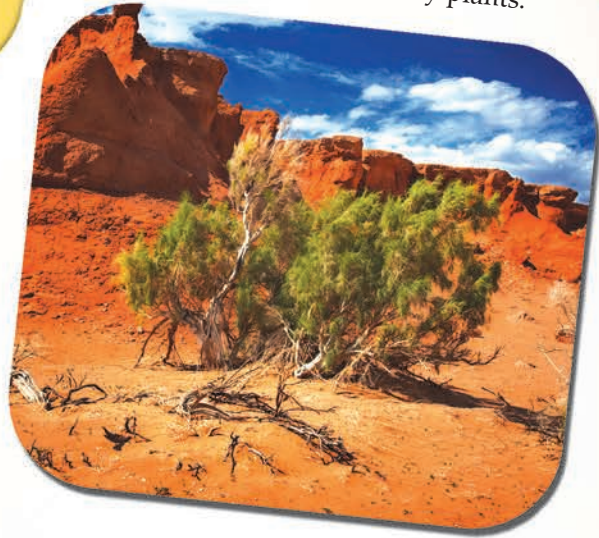
The oldest species of camels *Protylopus* evolved in North America about 40 million years ago. It was as small as a jackrabbit!



Did you know?

Camels spit! They bring the stored food out and use it to distract attackers.

The Bactrian camel feeds on thorny shrubs, dry grass, and salty plants.



Living a tough life

In a desert, food is not that easy to come by. Fortunately, my hump stores excess fat for times when there is no food around. I drink huge quantities of water – up to 57 litres at one time. And unlike humans, I can survive on salty water too. Sometimes, I journey over vast distances in search of food and water. I travel with my relatives in groups of 6–20 members. A male camel leads the herd.

Fighting to survive

Today, there are just 950 of us left in the wild. I live in only three separate habitats across Mongolia and China. And what is more, farmers who want to protect grazing land for their cattle also kill me.

My Arabian relative

The Dromedary, or Arabian, camels are my relatives from the desert lands. They can be found in the Middle East and northern Africa. You will find it interesting to know that my Arabian relatives have only one hump, while I have two.



Industries such as mining have destroyed the habitat of the Bactrian camel.

All is not lost

Yes, all is not lost! The governments of China and Mongolia have joined hands to save me! They have decided to protect my habitat – the great Gobi Desert. Camel reserves have been created, both in China and Mongolia. I can be saved if people are made aware of the danger I am facing!

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African wild dog

Blast from the past

Stories such as Little Red Riding Hood and Three Little Pigs gave birth to myths about African wild dogs being cruel hunters.

Bio

Weight: 25 kg; Height: 0.7 m; Lifespan: 10–12 years



I am the African wild dog, and I have a story to tell. People think I am cruel and bad. But that is not really true! Today, I am fighting to survive in the vast grasslands of East Africa.

**I am a dog,
just wild!**

I am a rather unique creature. My bushy tail is just like that of any other dog, but it has a white tip. I use my tail to signal to my mates when we go out hunting. I have a black muzzle and a patch of black fur, which runs down the middle of my forehead. Yes, you are right, I look more like a hyena than a dog!



African wild dogs usually hunt once a day. They prey on rats, antelopes, and birds.

Little I can do to live

My mates and I may go extinct soon. Just about 5,000 of us survive in the wild today. We are shot and killed by farmers, hunters, and even forest guards. Many of my mates have died due to diseases like rabies.

Did you know?

A pack of nine African wild dogs can eat 100 kg of meat in less than 15 minutes!



Here comes the helper!

I live in packs of 6–20 African wild dogs. I use short barks and howls to talk to my friends. The entire pack helps to rear our young ones. Because the pups and their mother are too weak to go out hunting, my mates and I bring food for them.



The home of African wild dogs is being destroyed due to deforestation.

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Giant panda

You can easily recognize me, can't you?

I have thick, woolly white fur, with black or brown patches around my eyes, ears, legs, chest, feet, and shoulders. And do check out my small black tail! My teeth are huge and flat. My wrist bone is so large that it looks like a thumb!



Did you know?

When animals hibernate, they use the fat stored in their bodies to last through the winter. Pandas cannot hibernate, because their bamboo diet does not contain enough fat!



Large forest areas that were the panda's habitat have been cleared for wood and farming.

My "bear"y habits

I am a vegetarian bear. Oh, how I love bamboo! I can eat up to 38 kg of bamboo every day. I have a special food pipe, which helps me swallow sharp pieces of bamboo. Everyday, I spend 14 hours eating! When I am not eating, I take rest or sleep.

Dying too soon

My home is vanishing! I am forced to live in small patches of land. People have taken away all the bamboo for building houses. What will happen if all the bamboo disappears? Yes, I will die. As if this were not enough, humans are also hunting me down.

Pandas use their teeth and wrist bone to crush and eat bamboo.

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Saving the pride of China

And the Chinese are not taking it easy at all. They have invested more than one billion dollars in protection programmes. There have been efforts to save my habitat. But more people need to get concerned about my survival. Only then can I hope to live a long and healthy life.

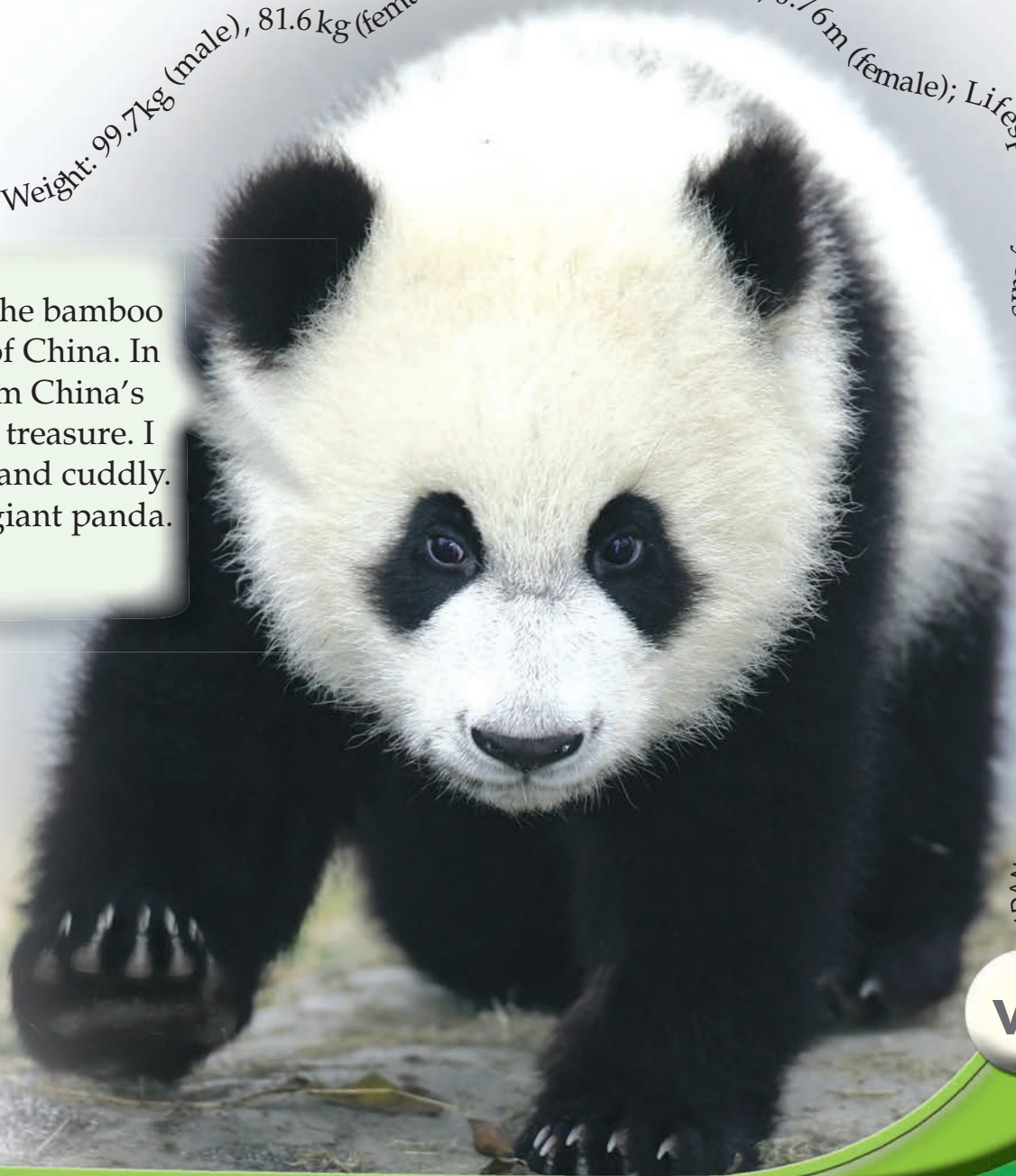
Blast from the past

Pandas have been on the Earth for so long that they are known as living fossils. A number of species such as the Chinese rhinoceros, which lived on the Earth with pandas, have become extinct.

Bio

Weight: 99.7kg (male), 81.6 kg (female); Height: 0.91 m (male), 0.76m (female); Lifespan: 20 years in the wild

I live in the bamboo jungles of China. In fact, I am China's national treasure. I am large and cuddly. I am the giant panda.



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Polar bear

Blast from the past

The polar bear, with its white and yellow fur, has actually descended from the brown bear!

I live on top of the globe – the Arctic Circle. But the ice here is melting fast, and I may not last another summer! I have become the most familiar symbol of global warming. I am the polar bear.

Bio

Weight: 408.2kg (male), 226.7 kg (female); Height: 2.6 m (male), 2m (female); Lifespan: 15-18 years

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Large and furry

I have a large body with a small head and even smaller ears. My fur protects me from extreme cold. I have fur even on the soles of my feet. Some parts of my feet are not covered with fur and are rough like sandpaper. This prevents me from slipping on ice. I also have a small tail.



Mr Adaptable!

I am an excellent hunter, and I love eating ringed seals. I also feed on berries and grass! I can easily go without food for many weeks. My large stomach can store up to sixty-eight kilograms of food. Sometimes in summers, I dig dens for myself to stay away from insects and, of course, the heat!

First victims of global warming

First, the Inuit people, who live on the North Pole, hunted me. Then, oil and gas companies began destroying my habitat. Now, as the Earth is getting warmer, the ice on the poles has started melting. If my home is destroyed, I will not be able to survive.

Let's not lose the polar bear

In November 1973, the International Agreement on the Conservation of Polar Bears was signed in Oslo. This agreement placed a ban on the hunting of polar bears. This alone cannot save me. You see, the Polar Regions are warming up faster than the rest of the world, and I am being pushed away from my habitat. So, it is important that steps be taken now to stop climate change.

The polar bear relishes seals. It eats the skin and the fat tissues and leaves the rest for scavengers.



Due to global warming, several species are dying, some of which were food for the polar bear. It means now there is less food for the polar bear.

Did you know?

The skin of the polar bear is actually black, absorbing more heat from the Sun and keeping the bear warm.



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African zebra

Size does matter

No two stripes on my body are alike. My stripe patterns are altogether different from the stripes on a zebra of another species. The mane on my neck is made of short, erect hair. I have a tufted tail. My long legs help me move pretty fast for my large body. I can run at speeds of more than 95 km per hour!



Did you know?

Zebras also smile! When they show their teeth, they are actually smiling.



Zebras take a bath in mud, so that when they shake off the dried mud, loose hair and dry skin also fall off! How is that for a beauty tip?

Here comes the big man!

My family is usually led by a male zebra, or stallion. The rest of the group is made up of females. When a young one, or foal, is born, the mother keeps all other zebras away from it for two to three days. The little zebra then starts recognizing its mother by smell and touch.

Lose grasslands, lose me

The land that was once my home has been taken by humans for farming. Cattle graze on my lands, leaving no food for me.



Humans kill zebras for the coat, which is used to make handbags, purses, and slippers!

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Quest to save the zebra

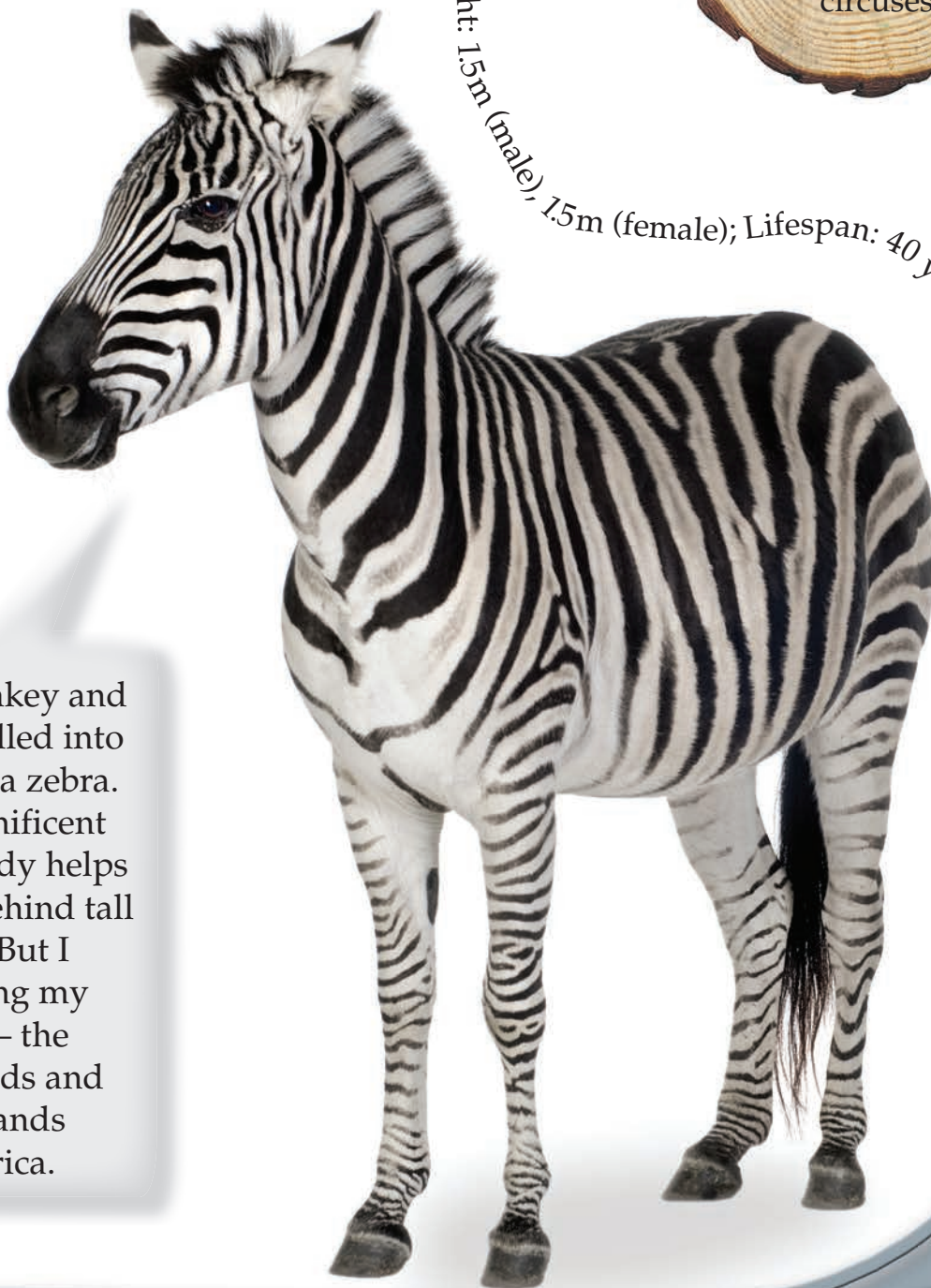
Vast areas have been marked out for me, so that I can live and graze. These are known as protected areas. My family is slowly getting back its lost home.

Bio

Weight: 449 kg (male), 234 kg (female); Height: 1.5m (male), 1.5m (female); Lifespan: 40 years

Blast from the past

The Romans called the zebra *hippotigris* and trained it to pull carts for exhibition during circuses.



I am a donkey and a horse rolled into one. I am a zebra. My magnificent striped body helps me hide behind tall grass. But I am losing my home – the woodlands and grasslands of Africa.

Least concern

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Yak

Hair is the difference

I have a long body and short legs. I have 15 pairs of ribs, while a cow has 11 pairs, and you humans have 12 pairs! I have a bushy tail and soft, silky black and brown hair. Some of my cousins have off-white hair. My neck is slender and slightly long. I have a heavy and bulky head with curved horns.

Bio

Weight: 1,000 kg

(male) 800 kg (female)

Height: 2 m (male), 1.09 m (female); Lifespan: 23 years



People think I am a cow, but I am actually a wild yak. The Himalayas in India, Nepal, Bhutan, and China were once my home. Today, I am found only on the high mountains of Tibet.



Climbing higher and higher

I enjoy a dip in lakes and streams, even in the freezing cold! In summer, I move to high areas, where there is snow, and then return to lower heights, once the weather cools down a bit. Food is scarce in the mountains, and I have to walk long distances in search of it. Luckily for me, I am an excellent climber.

Yaks cannot stand the heat. They would rather endure snowstorms.



Yaks graze on mosses and lichens and crunch snow when they are thirsty.

Into thin air

Yes, I might vanish some day! Humans have hunted me. Today, my homeland has been reduced by half. People have cleared forests on the mountains to grow food. And I am left with nothing to eat.

Did you know?

Wild yaks follow the leader. Literally! They travel on snow in a single line and step on the footprints of the leading yak.



Blast from the past

Yaks were first domesticated in Tibet in 1 millennium BC. Today, there are about 12 million domesticated yaks and less than 10,000 wild yaks!

Saving the king of the mountains

I have been put on the "protected" list in China and India. People who are concerned about my survival have surveyed my habitat. Laws protect me so that people do not kill me anymore. Mountain areas have been set aside as reserves, especially for me.

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One-horned rhino

The rhino trail

My thick silver-brown folded skin makes me look as if I am ready to go to war! My horn is made of keratin, the same stuff that your fingernails are made of. The horn can grow up to a length of 0.2–0.61 m. My upper legs and shoulders are covered with wart-like bumps. My cousins, the black and the White rhino, are found in Africa. Oh yes, I am also related to the horse and the zebra.

Did you know?

Rhinos mark their areas with dung piles, which may be almost a metre high!



Bio

Weight: 2,200 kg (male), 1,600 kg (female); Height: 1.82 m (male), 1.6 m (female); Lifespan: 47 years

I am large, grey, and bulky. I am the greater one-horned rhinoceros. I come from the Indian subcontinent. Today, I am found only in Nepal and India.



A loner by choice

I swim and wallow in water. I also spend time in mud bogs. The mud protects my skin from insects. Though I like living alone, tickbirds and egrets usually keep me company. They sit on my back and pick insects off my skin. In a fight, I can cause some real damage with my horn. I also use my lower teeth to fight. I can even make a speedy getaway. I can run at speeds up to 55km per hour!



Not only does the one-horned rhino wallow in water, it is also an excellent swimmer.



Rhinos eat grasses, buds, leaves, and fruits. They use their upper lip as a finger to pluck or gather food!

Making a quick buck

Even though my number has risen a bit since the 1900s, I am still endangered. I am killed for my horn, a prized catch for hunters. People in Asia believe that my horn can heal the sick! The grasses and fruits I feed on are gone. I now survive only in protected areas.

Blast from the past

The Chinese consider the rhino to be the king of animals. They also think it is full of love and gentleness.



Hope lives

Some people have been trying to create safe havens for me. The Indian government has banned the killing of rhinos. Nepal has created protected areas, where local people are involved in saving us.

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Tasmanian devil

Did you know?

The Tasmanian devil's pouch is different. It opens backwards. This does not allow dirt to enter the pouch when it is digging.



The Tasmanian devil preys on small animals, such as sheep and poultry, but it prefers to feed on dead animals.

Small but fierce

I am the largest marsupial in the world. We marsupials keep our little ones in a pouch on our bodies, until they are ready to go and live on their own. I have a black furry coat. My snout and long, bushy tail make me look like a large rat. I have a white stripe running right above my front legs, which makes it easy for others to recognize me.

Devil in the dark

I hunt in the cover of dark, when everybody is asleep, because I am a clumsy hunter. I can roam up to 16 km in search of food. My strong jaw helps me tear the flesh that I eat. My pale pink ears turn bright red when I am flushed, excited, or angry.

Trouble maker?

Settlers in Australia felt that I was a nuisance. So, I was driven deep into forests. Now, these forests have been cut down for farming or destroyed by forest fires. Many members of my family have been killed by hunters.

Other large carnivorous animals were also introduced into the forests. And yes, they ate many of my family members!

The Tasmanian devil's fierce gape or yawn is not a sign of aggression. Rather, it is a sign of fear and uncertainty.



A happy ending

Laws have been put in place in Australia to protect me since 1941. This has led to a slow increase in our population. A number of zoos, too, have vowed to protect us.

Bio

Weight: 5.5-12 kg (male), 4.1-8.1 kg (female); Height: 0.30 m (male), 0.30 m (female); Lifespan: 7-8 years

I am found in the island state in Australia, called Tasmania. The blood-curdling screams, which I let out at night, earned me my name! I am the Tasmanian devil.

Blast from the past

In 1830, a building company called Van Damien's Land Co. introduced a scheme, under which anyone who killed a Tasmanian devil would be given a prize.



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Koala



♂

Weight: 13 kg (male), 10 kg (female);

Height: 75 cm (male), 70 cm (female); Lifespan: 10-15 years

Koalas eat only eucalyptus leaves.

Ain't I cute?

I am covered with a thick, greyish fur, which is white on the inner arms and legs. I live on eucalyptus trees and have special claws that help me climb. The skin on the bottom of my hand is rough and ridged, which produces friction as I climb. My strong arms and shoulders allow me to leap from tree to tree.

I am cute and cuddly. I am a koala. I am not a bear. I am a marsupial. I am not a pet, and I prefer living in the wild in Australia.



As baby koalas grow bigger, they move out of their mother's pouch.

Born to survive

I move slowly and spend 18 hours a day sleeping. I chew eucalyptus leaves all day. No wonder, I smell like cough drops!

Our young ones are called joey. They cannot hear or see when they are born. But in about six months, their eyes and ears begin to grow. They start living on their own after they turn one year old.

Killing me for nothing

Once upon a time, I used to be killed for my coat. Today, most koalas die due to motor accidents or are killed and eaten by pet dogs.

Did you know?

Each koala has its own "home tree". Other koalas pay visits.



Forest fires are the main reason for koala deaths. These fires are often created by humans.

Blast from the past

Imagine a giant koala. Fossils of more than 12 koala species have been found. These animals were much larger than the ones found today.

Safe in the wild

People are collecting money to fund different efforts to save my habitat and me. I can safely give birth to my young ones in zoos and wildlife parks. Scientists are researching on ways to protect me.

LEAST CONCERN

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Asiatic lion

All hail the king

I am the second largest member of the cat family, just after the tiger. The colour of my coat is yellowish-brown. Only the male members of my family have the majestic, flowing mane around the neck. My mane protects my throat during fights with other animals. I have short but powerful legs. My jaws are strong and my teeth are long and sharp.

The friendly cat!

I usually hunt at night. I like hunting down prey near rivers or lakes within the forest. This way, the animals have no place to run and escape! All members of the family eat together.

Blast from the past

The oldest lion fossil was discovered in Tanzania. It is 3.5 million years old!

I am the king of the jungle. I am the lion! A thousand years ago, I was found in most parts of the world. Today, I live only in the dusty ranges of Africa and the Gir Forest in India.

As death nears the Asiatic lion

There are only about 400 of us remaining in India's Gir forest. As humans moved into the Gir Forest, many of us lost our homes. Many members of our families died after falling into wells dug up by humans. Others have died by stepping accidentally on electric wires left on the ground by humans!



Female lions are experts at stalking prey. The colour of their coat helps them hide among thick grasses and trees.

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My African relatives

My distant relative *Panthera Leo*, or the African Lion, is a very large cat. Just like us, their population has reduced greatly too. They are now found in parts of sub-Saharan Africa. Though the African lion is endangered too, we Asiatic lions could die out sooner.

Did you know?

A lion's roar can be heard over more than 8 km!



Bio

Weight: 150–250 kg (male), 120–180 kg (female); Height: 1.2 m (male), 1.1 m (female); Lifespan: 16–18 years in the wild



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Arabian oryx

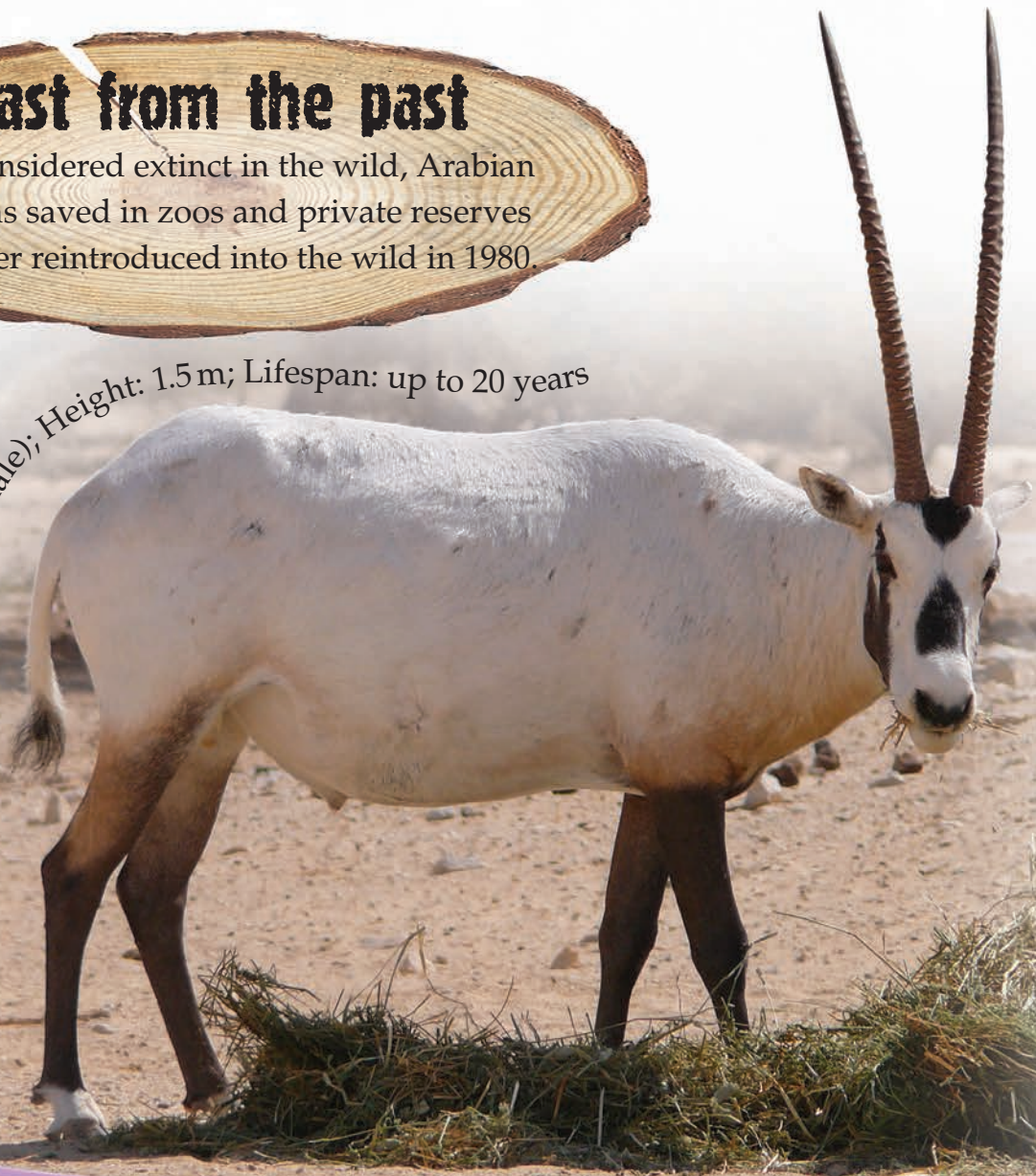
Dealing with weather

We live in arid plains and deserts, where the weather is generally hot. However, we adjust well with diverse climates. Our white coat reflects back the heat of the Sun, keeping us cool during day time. We can also adapt to the colder temperatures at night. Let me explain to you exactly how we do it. Our body temperature rises on hot days and the excess heat is released during the cooler hours of the night. The camel performs a similar trick, but we can withstand much higher temperatures.

Blast from the past

Once considered extinct in the wild, Arabian oryx was saved in zoos and private reserves to be later reintroduced into the wild in 1980.

Bio Weight: 90 kg (male), 80 kg (female); Height: 1.5 m; Lifespan: up to 20 years



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Arabian oryx are social animals, as they can be mostly found in herds of 5–30 members.

Pretty features

We are large antelopes, with long, prominent horns. Our horns are fairly straight and are directed backwards from the eyes. But the horns of female oryx are usually longer and thinner than the horns of males. We have a pretty long mane as well, which extends from head to shoulders. The male Oryx have a tuft of hair on the throat. When we are young, we have shades of brown and markings only on our tails and knees. On growing up to adulthood, our colour generally varies from cream to gray and browns, with striking markings of black and brown as well.



The head of an Arabian Oryx is highly valued as a trophy.

We are important too

We can detect rainfall and fresh plant growth from a great distance. After locating the same, we move in the same direction. Since rainfall is irregular, we have to travel over hundreds of square kilometers in no set pattern.

Restoration efforts

Late Sheikh Zayed Bin Sultan Al Nahyan took a personal interest in our declining population. In 1968, he launched a successful conservation programme. Our population had reduced to four in the wild. He captured us and started a captive breeding programme in Al Ain Zoo. After the development of Sir Bani Yas Island, Sheikh Zayed started another captive breeding programme with 3 female and 2 male Oryx, and today our numbers have substantially increased in the island. Thanks to Sheikh Zayed, the UAE is now home to the largest population of Arabian Oryx in the world with more than 4,500 heads of Arabian Oryx, of which 3,500–3,700 live in natural reserves and private farms of Abu Dhabi.

Did you know?

Some body parts of the Arabian oryx are known to have medicinal uses.



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Iberian lynx

Bio

Weight: 12.8 kg (male), 9.3 kg (female); Height: 0.9 m (male), 0.60 m (female); Lifespan: 10–15 years



Snowy survival

I have a yellowish to silvery-brown coat and cheetah-like spots that are not really visible. I have a short tail, at the black tip. I have tufts of black hair on the tip of my ears. My large, padded paws, which look like snowshoes, help me walk on snow. My hind legs are longer than my fore legs, allowing me to jump over long distances.

Blast from the past

The Academy of the Lynxes, founded in 1603, is the world's oldest group of people dedicated to science. It is named after the lynx, whose sense of sight was thought to represent the sharp power of observation needed for scientific research.

A member of the cat family, I am larger than a house cat but much smaller than my larger cousins, the tiger and the lion. I am a lynx.

Alone I live

I wander and hunt alone in the mountains. I usually hunt at night and prefer hares, rodents, and birds. Sometimes, I kill bigger animals like deer. My sharp eyes and ears help me spot my prey. I make my dens in hollows of trees or among dense thickets. The females in my family give birth to four to five kittens during winters.

In Spain, domestic rabbits are being introduced into the wild so that the lynx may have prey!



Did you know?

The tongue of a lynx is covered with rows of rough bumps that help it peel the skin of a prey.



Construction of ski resorts by clearing mountainsides destroys the habitats of lynxes.

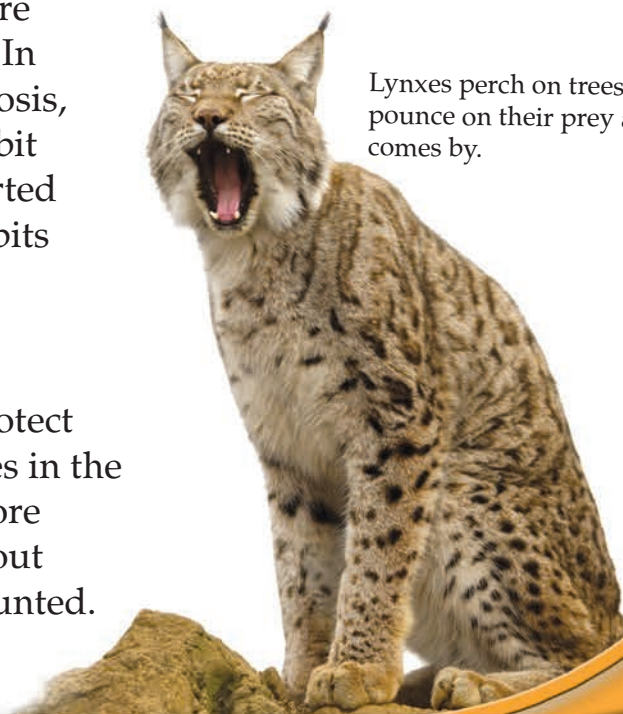
The forests are going

I have been killed for my fur in the past. Today, I face the loss of habitat. Trees are being felled and roads are being made through forest lands. In Europe, a viral disease, Myxomatosis, was introduced to control the rabbit population. As their numbers started decreasing, so did ours, since rabbits were our main food.

Protection on the way

Many groups have resolved to protect me in my own habitat. Some states in the United States have vowed to restore the lynx. Others have brought about laws that protect us from being hunted.

Lynxes perch on trees and pounce on their prey as it comes by.



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Orangutan



Baby orangutans live with their mothers longer than any other mammal, except humans – until they are 7–8 years old.

Fit and flexible, here comes the swinger!

I have large cheek pads and a big sac in my throat. I have light red to dark brown hair. I have long and strong arms and short legs. This helps me to move fast from one tree to another.



Orangutans usually eat mangoes and figs but can sometimes survive on leaves, barks, and soil.

My table manners

Some members of my family eat other creatures, particularly the slow loris. I even wipe my hands when I have had dinner. I use leaves as napkins or gloves!

I remain active during the day. I make nests or beds of branches and leaves to sleep at night. Young ones in my family travel with their mothers. Male orangutans live alone.

I am dying!

Forests are my home, and I can survive only on trees. Today, I am dying because forests are disappearing! More than 80 per cent of my habitat has been destroyed. Also, humans hunt me in some parts of the world. My family in Sumatra may become extinct in the next 10 years.

Did you know?

Gorillas, chimpanzees, and bonobos are the other great apes.



Save me!

The United Nations Environment Programme has launched the Great Ape Survival Project to save me and my mates. People are being taught how to use the wealth of forests without destroying my habitat. With a little luck and a whole lot of labour, the great apes might still rule the jungles!

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Bio

Weight: 50–90 kg (males), 30–50 kg (females); Height: 1.37 m (male), 1.06 m (females); Lifespan: 45–50 years in the wild, 50–60 years in captivity

I am a great ape. I am the orangutan. I use all my four limbs to swing from tree to tree. The native people of Malaysia call me “person of the forest”. Alas, my home is being destroyed today!

Blast from the past

The scientific name of the orangutan *Pongo pygmaeus* comes from a sixteenth century story by a British sailor Andrew Battell, who was held prisoner by the Portuguese in Angola.



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Blanford's fox

Identification

I am a small species of fox. I am light tan or greyish in colour with a pale coloured underside. My long, bushy tail has a black tip. I am solitary and active at night.



Did you know?

The blanford's fox is also known by other names, such as Afghan fox, royal fox, dog fox, steppe fox, black fox, king fox, cliff fox, or Baluchistan fox.

Bio

Body length: 40–50 cm; Tail length: 33–41 cm; weight: 3–4 kg; average lifespan: 4–5 years in the wild

Growing up fast

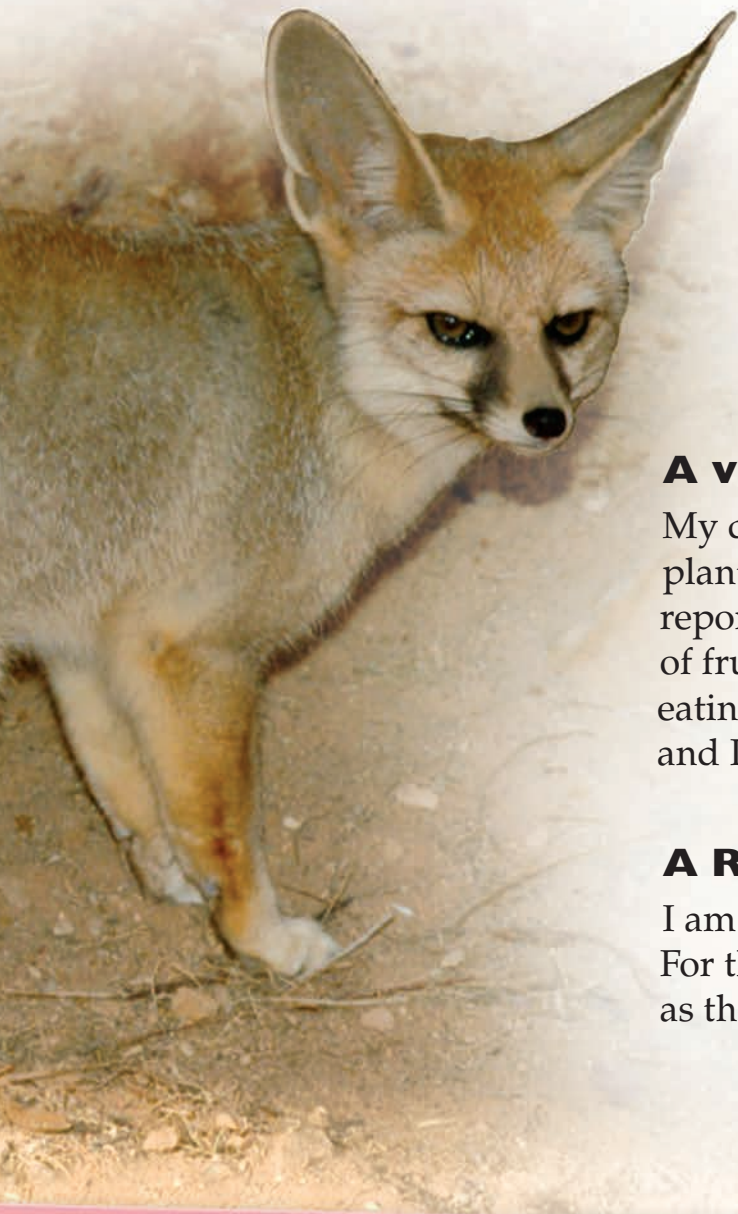
When I grow up to four months of age, I begin to forage alone in the territory. By the time I am 10–12 months old, I am mature. I usually have a life of four or five years. However, the maximum recorded age is 10 years.



Balnford's fox are found in semi-arid regions, steppes, and mountains.

Jumping jacks

I have the ability to jump and climb rocks. Astonishing but true, I can jump up to heights of 3 m with ease. Indeed, climbing vertical, crumbling cliffs by a series of jumps up vertical sections is part of my regular movements. I use my sharp, curved claws and naked footpads for easy movement on narrow ledges, while my long, bushy tails work towards counterbalancing.



A varied diet

My diet is omnivorous – consisting of plants, insects, small mammals – and reportedly more frugivorous – consisting of fruits – than that of other foxes. I love eating crops like melons, seedless grapes, and Russian olives.

A Royal fox

I am a considered to be a beautiful fox. For the same reason, I am also known as the royal or king fox.

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Tiger

Call me stealthy. Call me a tiger!

Not many years ago, I lived all across Asia, up till Siberia. Today, there may be only 2,500 of us left in the world!

Bio: Weight: 180–306 kg (males), 100–167 kg (females); Length: 1.4–2.8 m; Height: 1.0–1.5 m (at shoulders)

Blast from the past

The sabre-toothed tiger is not a tiger at all! It is best described as the sabre-toothed cat.

Tiger! Tiger! Burning bright

My coat is dusty-brown to rust-red in colour. It has beautiful black stripes. In fact, I have more than hundred stripes on my body! I am the largest member of the cat family. My body is built for hunting, my hind limbs are shorter than my fore limbs. This helps me jump over long distances to capture my prey.



Tigers can eat more than twenty-seven kilograms of meat in a single night!



Shadow in the dark!

I usually hunt in the dark of the night. I cover the leftover food with grass and leaves and come back to it when I am hungry. And why not, since I kill only once in 10 or 20 attempts!

The Chinese use the body parts of tigers to make traditional medicines.

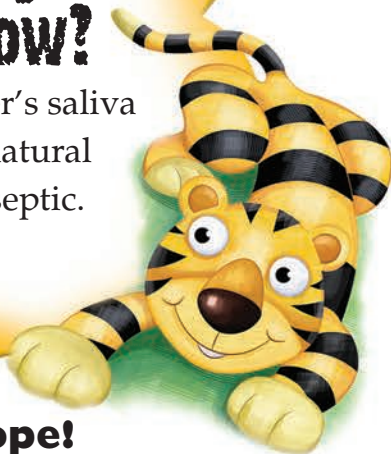


Does my story end here?

A hundred years ago, there were more than a hundred thousand of us in the wild. In the last 20 years, we have been killed for our gorgeous coats. Tiger sanctuaries, created to keep me safe, have also been attacked by poachers.

Did you know?

The tiger's saliva is a natural antiseptic.



Tiger skin rugs are still in demand in China and Europe.

There is hope!

Some people are concerned about my survival. I need thick, green jungles to survive, so they are making efforts to expand my habitat. Many poachers have been caught and punished!

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Fighting for the paws

The World Conservation Union, or the IUCN as it is popularly known, is the world's largest organization that works for the protection of nature and natural resources. The headquarters of the IUCN are in Switzerland. The IUCN prepares lists of threatened plants and animals every year. Scientists at the IUCN study the current population of the species as well as where it is found. The organization then tries to help countries develop ways and means to conserve these dying creatures. The IUCN categorizes species as follows.

Extinct: If the last individual of a species is believed to have died, the species is considered extinct. The Yangtze River dolphin, or Baiji, was officially declared extinct in 2007.

Extinct in the Wild: A species is thought to be extinct in the wild if it can no longer reproduce on its own. Cuttings of such plant species have to be used to produce them, and animals have to be bred in zoos or sanctuaries.

Critically Endangered: Any species is thought to be critically endangered if data suggests that it might become extinct in the wild in the next ten years. This means that its population has reduced significantly, and it will no longer be found in the regions where it used to be. Animals like the gorilla, gharial, rattlesnake, shark, flying fox bat, fox, a large number of trees, and a few species of fish, frogs, parrots, toads as well as corals have been declared as critically endangered.

Endangered: Animals like the gazelle, Egyptian vulture, parakeet, blunt-nosed leopard lizard, the Hawaiian finch, green sphinx moth, sawfish, a few species of owls, frogs like the African reed frog, and the Slender Loris are listed as endangered. The survival of these animals is in extreme threat in the next ten years.

Vulnerable: The IUCN groups the animals that face a threat but can be conserved in the near future as vulnerable. This group includes the white-headed vulture, the alligator lizard, the lemur, the shark ray, the butterflyfish, the common hippopotamus, the giant gecko, and a few crocodile species. These animals might soon be included in the endangered or critically endangered categories if steps are not taken immediately to protect them.

Near Threatened: Species that are not vulnerable, endangered or critically endangered but might fall into any of those categories soon are classified as near threatened.

Least Concern: Species that are widely found in plentiful numbers are classified under least concern.

Note: *The conservation statuses in this book are not solely based on the IUCN Red List. For some creatures, national and local data have been used.*



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Glossary

underbelly: the soft belly or underside of an animal's body

poaching: killing or hunting of land animals, which is not permitted by law

aboriginal: those who live in a region since the beginning; natives

lichens: a kind of fungus

reserves: an area protected especially for wildlife, also called nature or wildlife reserves

unicorn: a creature with one single horn projecting from its forehead and found in myths and legends

ancestor: the person/persons from whom one has descended; a predecessor

canine: an animal of the family canidae, especially a dog

habitat: an area or environment where an organism (or group of organisms) normally lives

viral: related to or caused by a virus

sac: a pouch or pouch-like structure in an animal

cavities: a hollow area within the body

scavenger: an animal that feed on dead or decaying matter

hibernate: to pass the winter season sleeping or in an inactive state

THIS IS A GREEN BOOK



About the Environment Agency – Abu Dhabi (EAD)

Established in 1996, the Environment Agency – Abu Dhabi (EAD) is committed to protecting and enhancing air quality, groundwater as well as the biodiversity of our desert and marine ecosystem. By partnering with other government entities, the private sector, NGOs and global environmental agencies, we embrace international best practice, innovation and hard work to institute effective policy measures. We seek to raise environmental awareness, facilitate sustainable development and ensure environmental issues remain one of the top priorities of our national agenda.

For more details, please visit:
<http://www.ead.ae>

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Life on LAND

The tiger is disappearing and so is the elephant. There are only about 350 Asiatic lions living today. The lynx and Tasmanian devil too are dying a slow death. But do you know these creatures well enough? Learn more about the life of these endangered animals so that you too can be a part of the campaign to save them!

Other titles in this series

Life in the Water

Life in the Sky

Life in the Amphibian World

Life in the Reptilian Realm

Life in the Plant Kingdom