



OUR GRASSLANDS

You may know them as prairies, steppes, meadows, savanna or pampas – grasslands cover over a quarter of the land on our planet.

The first peoples hunted across their vast spaces. Later they settled and began farming, turning grasslands into fields of corn, wheat or other crops. Grasslands are found on every continent except Antarctica. They are found where there is not enough regular rain for forests to grow. Instead these huge areas are covered in grasses which can keep on growing even after being chewed on by animals. When rain arrives, many grasslands are covered in flowers. They can even spring back to life after fires.

Grasslands also absorb carbon from the atmosphere and store it underground, helping to prevent global warming. The more different plant species there are in a grassland, the more efficient it is at absorbing CO₂.

THE GREAT EXPANSES

Across our planet, grasslands support huge numbers of grazing animals such as zebra, antelope and wildebeest. Many of these are constantly on the move following the rain that causes the grass to flourish, and can migrate over very long distances. In turn, these grazers stimulate new growth with their trampling feet, keep trees and shrubs from taking over, and provide food for predators including big cats and African wild dogs. This is all part of a natural balance and is made possible because there is enough space, meaning that the grazing animals get enough to eat without over-using the grassland.

Grasslands are not just valuable for wildlife. With their deep and fertile soils, no other habitat is as useful to humans. For over 10,000 years, people have used grasslands to support herds of grazing domestic animals and to grow staple crops. As the number of people has grown, so we have converted more grasslands to farmland.

Each year over two million wildebeest, zebras and gazelles migrate across Northern Tanzania and Kenya in search of green pasture.



GRASSLANDS UNDER THREAT?

The taming of the grasslands has meant that wild animals have lost their habitats. They are forced to try to find food or living space closer to people, and this can lead to clashes. Elephants may damage crops in their search for food, and predators may hunt livestock or even humans if food is scarce elsewhere. Grassland animals are also threatened by hunters. In recent years, attacks by poachers on rhinos to steal their horns has brought the species to the edge of extinction.

Too much grassland habitat is being taken by humans to use for farming. But much of what we grow we do not eat directly. We are destroying vital habitats to give us a meaty diet. The Cerrado savanna is home to a third of the species in Brazil, including the giant anteater, and is home to more than 4000 types of plant that grow nowhere else. But it is being converted into huge farmlands to grow soya beans. This crop is sent to China and Europe to feed chickens and cows, that themselves need large areas of land to farm.

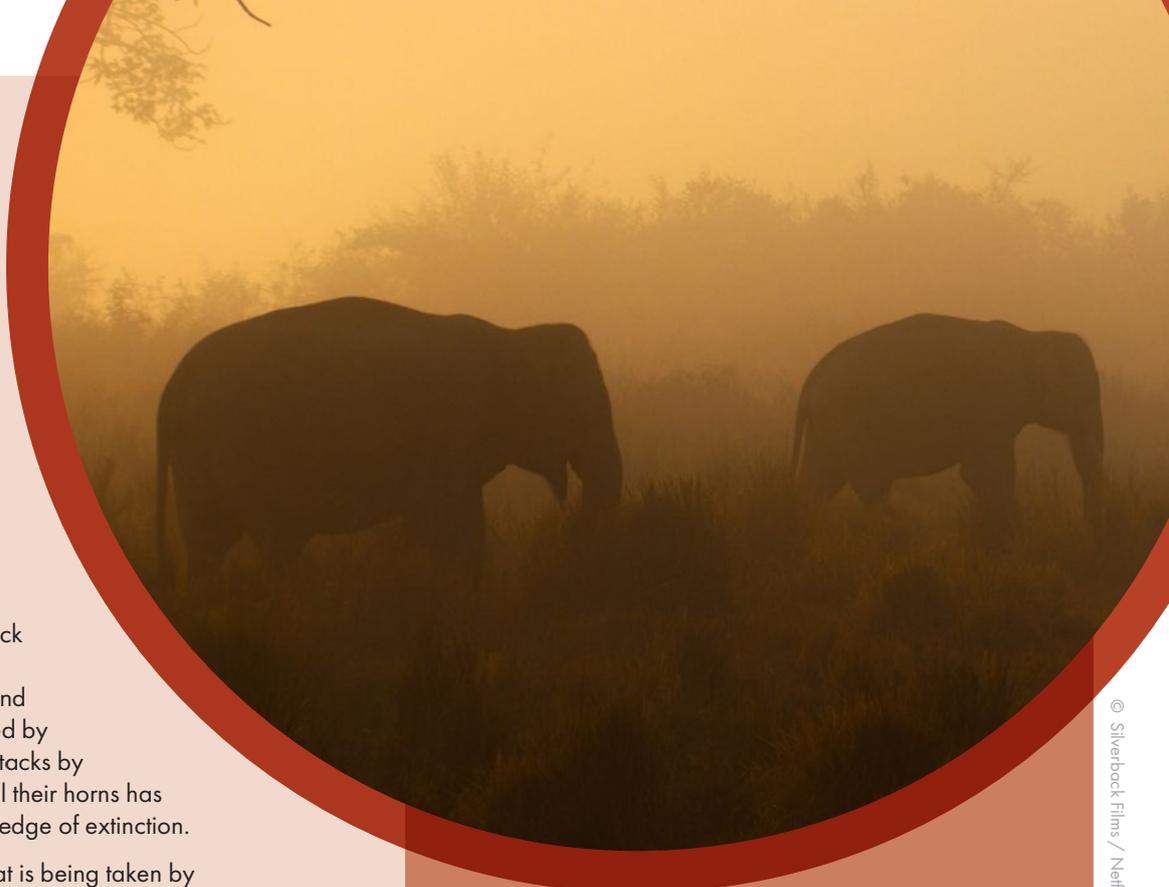
WHAT CAN WE DO?

GET SMART ABOUT HOW WE FARM

With careful choices, our planet can give us space to grow enough food for every person and leave enough space for the incredible wildlife that needs grasslands to survive. We need to think more carefully about what we eat and also how we can farm more efficiently to use less space. We can make crops – and land – more productive, and people are already exploring new ways to farm on the sides of skyscrapers, on floating rafts in the sea, and even underground.

EMBRACE PLANT POWER

If we swap some of our meat and dairy for plant-based foods such as vegetables, pulses, fruits, nuts and grains, then we could feed more people using less space. Producing 1 kg of beef uses almost 70 times as much land as producing 1 kg of vegetables or grains. Reducing our meat and dairy intake could be the key to a brighter future for grasslands.



Wild Indian elephants in Kaziranga National Park, Assam, India

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PROTECT PRECIOUS WILDLIFE

Grassland species need protection from poaching, and their migration routes must be kept clear to allow them to travel the distances they need to find food.



Humans and domesticated animals such as farmed cows now make up 96% of the mass of mammals on earth.



When space and food becomes restricted, wild animals can be forced into conflict with humans and livestock



The area of land used to raise animals for humans to eat is twice the size of South America, including the space used to grow their food.





If humans ate less meat and more plant-based foods we would need less space to farm for farmland.

Grassland ecosystems depend on there being space for animals to roam great distances to find food.

New ways of farming can help us to produce the food we need without taking up more space in grasslands.

MEET THE LOCALS: CHEETAHS

The cheetah is the fastest land mammal and can reach a speed of 60 miles per hour in just 3 seconds, though they can only keep this up for a few hundred metres. It is extremely agile and, with its stretchy and flexible spine can make swift and sudden turns as it hunts its prey. Huge nostrils mean that it can fill its lungs with extra air for the chase while its long tail acts as a rudder and helps it stay balanced.

Cheetahs hunt in the day. This means they avoid the leopards and lions who often prefer to hunt at night. They usually feed on smaller antelope, and they have to eat their prey quickly as they are too small to defend it from other animals, such as hyenas.

Cheetahs are sociable animals. The young stay with their mother for up to 2 years, and although female cheetahs then go off alone, brothers stay together for several years. A cheetah usually has 3 – 5 cubs but most do not survive beyond the first year as they are killed by lions, hyenas and even baboons.

Cheetahs live on the grasslands of eastern and southwestern Africa. In the Masai Mara in Kenya, they have adapted to make use of the landscape, perching on termite mounds and fallen logs to search for their prey. Their spotted coats blend with the high grasses – ideal when they are hunting.

But as human populations grow the cheetah's habitat is shrinking. With less hunting space and less natural prey to catch it becomes harder to survive and cheetahs, in some places, are coming into conflict with farmers. Today there are only about 7000 cheetahs left in the wild, compared to 15,000 counted in Southern Africa in the 1970s.

Humans are one of the greatest threats to the cheetah in the wild. Over 90 percent of cheetahs live outside protected management areas, meaning that they live and hunt in areas shared with human communities, many farming sheep, cows and goats. Cheetahs naturally see these farmed animals as food and can be responsible for killing and eating livestock.

To the farmers the loss of even a single animal can be critical to their livelihood and cheetahs have been shot or poisoned by farmers who see them as a pest. Conservation organisations are helping farmers to protect their livestock in ways that do not harm cheetahs, such as having dogs guarding the farm to deter cheetahs and other predators. However, the problem will only get worse unless we can find ways to live and farm that also allow cheetahs and other grassland wildlife the space they need.



FACILITATOR INSTRUCTIONS

KEY MESSAGES

PROBLEMS FACING OCEANS

- Reduction of space and blocking of migration routes due to large-scale farming
- Pollution of grassland habitat due to use of chemicals on farms
- Illegal hunting of endangered grassland animals for ivory or horn
- Human-wildlife conflict due to encroachment of human habitations and farmland into grassland habitat

SOLUTIONS

- Use less space for farming by reducing meat and dairy consumption and designing new efficient ways to farm
- Protection of migration routes for grassland animals
- Control the use of chemical pesticides and fertilisers on grassland farms
- Crack down on the illegal wildlife trade to deter poachers
- Educate local communities to find solutions to human-wildlife conflict that limit damage on both sides

SDGs LINKS

Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

<https://www.un.org/sustainabledevelopment/biodiversity/>

Ensuring a healthy and productive future for our grasslands also contributes to other SDG goals, including the following:

GOAL 2: Zero Hunger

GOAL 12: Responsible Consumption and Production

GOAL 13: Climate Action



GUIDED DISCUSSION PROMPTS

Use these prompts to generate a class or small group discussion based on the Our Grasslands briefing, or videos on ourplanet.com.

What is grassland like? What would it be like to spend time there and what might you see?

Through this discussion, children will be identifying the characteristics of grasslands which can be found on every continent except Antarctica.

How do humans use grassland landscapes and what effect could these activities have on wildlife?

Safaris, hunting, farming, building homes. Space taken up by human farms and developments means less space for wildlife and cuts off their routes for migration, hunting or foraging. Noise, light and pollution could disrupt natural wildlife behaviour. Hunting could drive species to extinction and have a knock-on effect on other species.

Producing 1 kg of beef needs 70 times as much land as producing 1 kg of vegetables. What will happen if we keep turning grasslands into farmland? Why do you think meat production needs so much land?

What might happen to the species that live on grasslands? They will have less space and less food, so will become stressed and start to die out. If grassland soil is converted to farm or grazing land, and not cared for properly, then the nutrients in the soil are lost and nothing grows.

What could we do to help?

*Eat less/no meat
Grow our own food locally
Farm in different ways (vertical, underground, rooftop, floating farms etc)
Protect grassland habitats as nature reserves*

ACTIVITIES

ACTIVITY IDEA	SUGGESTED AGE	SUBJECTS
Keep a log of the foods you eat in one day. Determine how much of your diet came from grains, either directly from breads and cereals, or indirectly from livestock raised on grain products. How many different countries does your food come from? What does this mean for grasslands and the wildlife that live there?	7 – 14	Geography
Make a list of all grassland landscapes around the world and the wildlife that live there. Which are the strangest grassland creatures and which grasslands were in places you did not expect?	7 – 14	Geography
In small groups imagine an area of grassland (or bring up a satellite image on Google Earth) and consider how many of each animal or plant it could support. Consider the way they are interconnected, and what things could affect their numbers for better or worse. Consider seasons, rainfall, connectivity and space.	10 – 14	Geography
Make puppets of grasslands animals – glove or shadow puppets work well. Then create a performance for others with an environmental message.	6 – 11	Art Literacy Geography Citizenship
Design a farm that produces food using as little space as possible. Where would it be? What resources would it need to work?	11 – 14	Art & Design Science Geography
Write a short story or diary about the day in the life of a ranger working in a grassland national park to prevent poaching.	11 – 14	Literacy

More information

Grasslands: <https://www.wwf.org.uk/where-we-work/habitats/grasslands>

Get to know the Cerrado: <https://www.youtube.com/watch?v=kYm3fuHq6eM>