

### Wildlife Conservation

The role of Longleat and other animal collections



### In this presentation you can...

- Learn about some words related to the topic of wildlife conservation
- Learn about the role of animal collections in wildlife conservation



Let's start with some words...



Which of these words have you heard before? Do you know what any of these words mean?

Biodiversity
Extinct
Endangered animal
Wildlife conservation

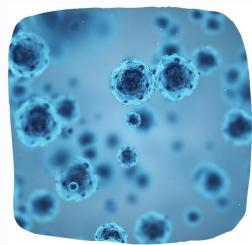


### Biodiversity

Biodiversity is the variety of all living things on earth; plants, animals, fungi, microorganisms and the habitats they come from.













When we refer to an animal as being extinct, it means that there are no longer any of this type of animal living anymore, anywhere in the world.

Examples of extinct animals include the dodo, the Tasmanian tiger, the dinosaurs.







### **Endangered animal**



An endangered animal is a species (a type of animal) at risk of becoming extinct.

Collectively, we refer to all animals at risk of becoming extinct as 'threatened species'. Endangered is just one of the categories that is used.













The International Union for Conservation (IUCN) has created a 'red list' that show the status of species. All of the species they have collected enough information about are ranked from 'least concern' to 'extinct'. For example Amur tigers are listed as critically endangered on the red list.

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Wildlife conservation is the protection of wild species and their habitats.

According to the IUCN red list, more than 35,500 species are threatened with extinction but many governments, organisations and individuals are taking action to help both the species and their habitats.











Let's think more about what role Longleat and other animal collections can play, to help conserve the planet's wildlife.



### Role of animal collections in wildlife conservation

There are three main roles they play:

- Conservation education and awareness raising
- Housing and caring for back up populations and conservation breeding programmes
- Supporting conservation in the wild



## The educational role of animal collections

### Getting up close to wild animals

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Animal collections allow visitors to see animals they may never get the chance to see in the wild.

Often, guests may get close to animals and have an inspiring experience. Being personally close to a live animal is an experience few people forget.





We want individuals to support conservation projects and make changes in their lifestyle to help animals and their habitats. This is more likely if they have opportunities to connect with nature.

Once people are interested, we can help them to understand more about animals and wildlife conservation.

## LEARNING with LONGLEAT

### Learning with Longleat

In 2019, over a million visitors came to Longleat and they had the opportunity to see dozens of different species of animal. Some of these are likely to be animals they've not seen or even heard of before. They were able to increase their knowledge of animal species.

At Longleat we have different ways visitors can learn more about animals, their habitats and how they may have an effect in conservation efforts.

- Interacting with a keeper
- Attending animal talks
- Close encounters with animals
- Reading information displayed on enclosures
- Using the Longleat App
- Reading the Souvenir Guide Book







Schools and colleges come to Longleat to learn about a particular topic linked to their work back at school. We offer specialist sessions for them where they get to meet animals close up. We also go out to schools with some of our small animals as part of our outreach programme.



## Back up populations and conservation breeding programmes





With the many problems affecting animal species in the wild, such as habitats being destroyed or animals being hunted, keeping animals in captivity can act as a safety net to stop them becoming extinct.

This is the case for species such as the Scimitar-horned oryx and the Pere David's deer, both kept at Longleat. They are classified by the IUCN as Extinct in the Wild.







As other animal species become increasingly threatened, captive animal populations become more important than ever.

### Desertas wolf spider conservation programme



These spiders are only found in only one valley on the uninhabited Desertas Grande island, off the south coast of Madeira. It is thought that only around 4,000 Desertas wolf spiders survive in the wild.

Their wild habitat is at risk. An invasive species of grass is spreading across their habitat floor, changing the composition of the soil and preventing the spiders from building their burrows.



Longleat is one of seven animal collections working with the Portuguese government on the conservation programme. This programme is the first time ever that these spiders have been reared in captivity. Longleat's spiders help in vital data collection and research. They are kept in a bio secure unit so that they may potentially one day be re introduced to the wild if needed.

## Conservation breeding programmes



Animal collections do more than just keep back up populations in captivity. We make sure that those animal populations are healthy and well cared for. As part of this, it is important that we breed new generations.

Zoos and safari parks don't work on their own. They coordinate their efforts together to have a greater impact. They may work at a national level (with those in the same country) or internationally (with those in other countries).

#### Longleat is a member of both...

The British and Irish Association of Zoos and Aquariums (BIAZA): a group of animal collections that work together in the UK

The European Association of
Zoos and Aquaria (EAZA): a group of
animal collections that work
together across Europe



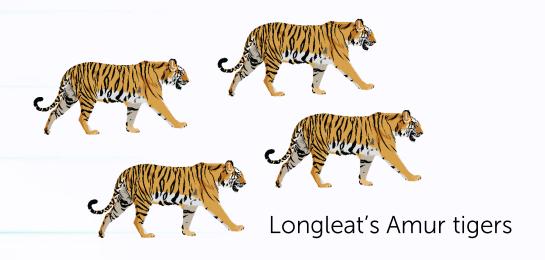


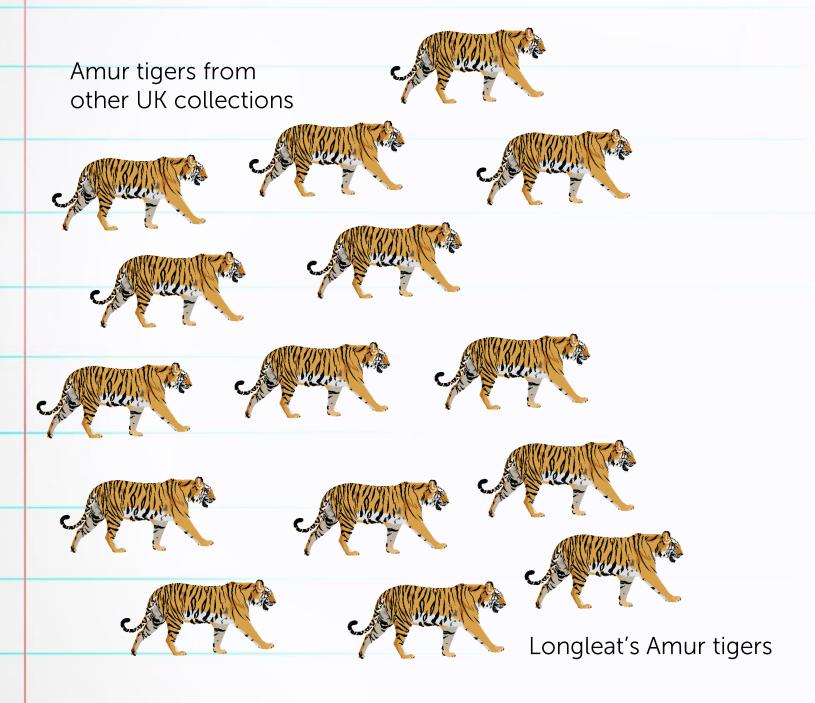


When thinking of animals in captivity it is easy to just think of them in separate groups, but for many species of animal they are managed as one population.

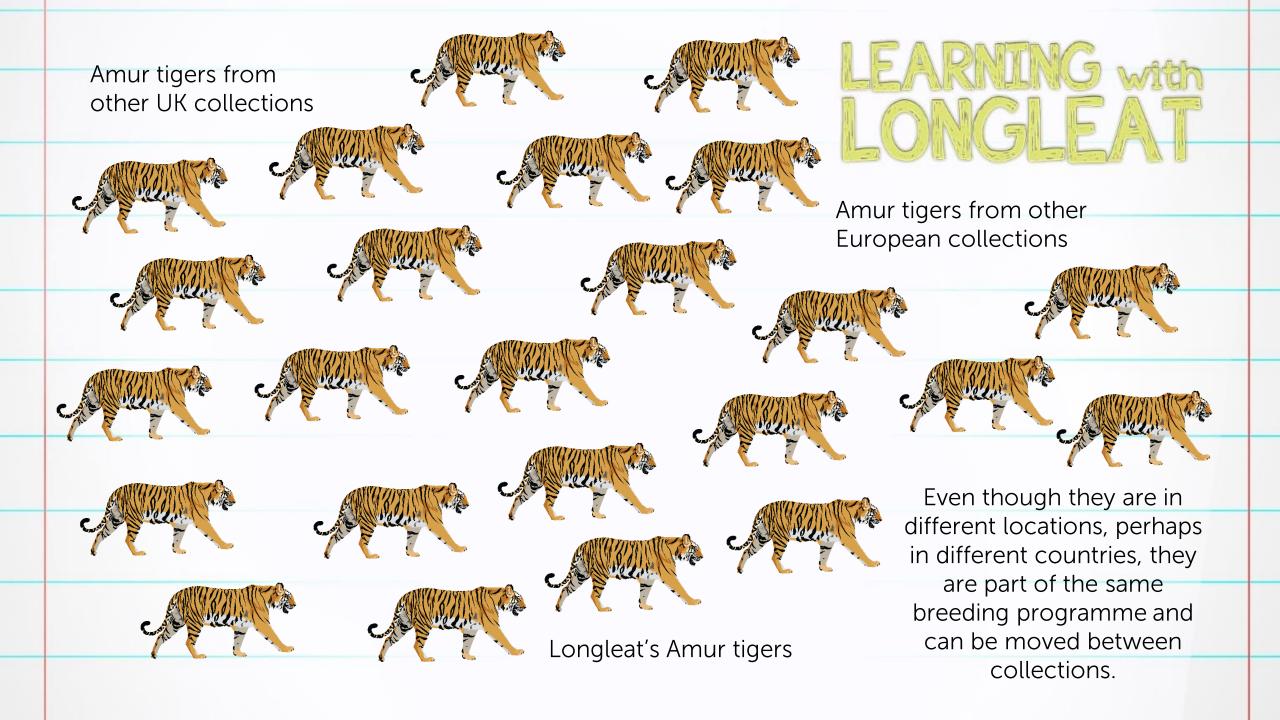
We can see this visually as we look at the next three slides

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## LEARNING with LONGLEAT



### How do breeding programmes work?



Each animal has it's own data record. This includes information on where they are located, medical conditions, and who their parents are.

These records can be linked together through a computer programme. The programme shows if animals at different collections are related.

The aim is to keep the breeding population as genetically diverse as possible. This means to keep as many genes as possible in the population, not just the genes from one or two family groups.

Each breeding programme has a coordinator that makes decisions about which animals will be matched up to breed.

As well as looking at the computer data, the coordinator also needs to think about things such as how far animals might have to travel to be paired up, or which zoos have enough space for them. Sometimes they may be making decisions about stopping animals breeding anymore, and splitting up pairs.











Longleat's Amur tigers are part of the European breeding programme (known as EEP)

Our adult male tiger came from Norway

Our adult female tiger came from Sweden

They have had two cubs so far. The EEP coordinator will use the computer software to help them decide if they would be a good match for another tiger somewhere in Europe. When the cubs are old enough, it is likely that one or both of the cubs will eventually move to another collection as part of a new pair.





#### European studbook (ESB)

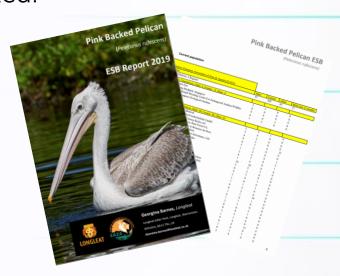
Some species of animal don't have a breeding programme at the moment but they may have a European Studbook (ESB).

A studbook keeper is responsible for each ESB. They collect all the information such as births, deaths, and transfers for their species.

By collecting and analysing all the relevant information on the species the studbook keeper can keep an eye on how well the population is doing in European zoos. They may recommend that a coordinated breeding programme is started.







European breeding programmes and Studbooks coordinated by Longleat keepers

Longleat keepers

Currently, Longleat runs the following EEPs and Studbooks:

Short-eared elephant shrew Secretary Bird Kinkajou Pinked-backed pelican Grey crowned crane





We can breed animal species that are threatened, to increase their numbers and, for some species, they may be reintroduced to the wild. Unfortunately for most species there isn't always a safe place to do this.

Therefore to fully help protect animal species, animal collections also need to be involved in supporting conservation in the wild.

### Working in Africa

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Tusk is a conservation charity that plans and funds wildlife conservation programmes in Africa. Longleat have supported Tusk for over 15 years, helping to fund a variety of conservation projects.

Lewa wildlife conservancy in Kenya is a very successful conservation area. Lewa is home to over 110 rhino and 23% of the worlds population of Grevy's Zebra. A big chunk of Longleat's funding has sponsored an anti poaching and rhino security team at Lewa. Longleat keepers have visited Lewa twice to learn about these programmes.

Other projects Longleat support: The Painted Dog Conservation Project, Zimbabwe

The Cross River Gorilla Project on the border of Cameroon and Nigeria The South African Wildlife College, South Africa

The Cape Vulture Project, South Africa The Living With Wildlife Appeal, multiple countries



# LEARNING with LONGLEAT

#### Working in Asia

Very little is known about the wild behaviour of the red panda. The Red Panda Network (RPN) is doing vital research in the field about this secretive species. The charity employs local people to help monitor their habitat as 'forest guardians'; providing them with an income, whilst aiding conservation.

RPN have provided local people with solar panels, biomass boilers and improved cooking stoves in order to reduce wood consumption, and decrease the dependency on the forest.

Pictured right is Longleat sponsor, Pema Sherpa, RPN's Forest Guardian Coordinator, with one of our red panda keepers; Sam.







Click on the logo for further information.

### Working in Australia



The International Koala Centre of Excellence (IKCE) was created by the South Australian Government, to lead research about koalas. IKCE has a team of scientists and ambassadors that work together to support koala conservation. Longleat's Lord Bath, Ceawlin Thynn is one of its patrons (supporters).

IKCE carry out research into the biology, management and conservation of koalas. This enables them to connect and provide learning and training opportunities to national researchers. They can lead on creating strategies for the sustainable management of koalas and their habitat.

To do their work, they need to raise funds to support these projects. Longleat helps to fund their work. Our koalas also act as a further research population. Our keepers keep daily records, which are very detailed, even down to recording how much they poo each day!

Here at Longleat we were extremely saddened to hear how the ongoing bushfires are affecting our friends in South Australia. The fires are having a terrible impact on people and wildlife and we want to do whatever we can to help.

We sent two of our dedicated Koala Creek keepers, Graeme and James, to South Australia to assist. They took an emergency Longleat relief fund of \$25,000AUD, which has been used to support a number of incredible organisations and their ongoing rescue and relief work.









Cheddar Gorge & Caves in Somerset is part of the Longleat Estate. It is classed as a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC) with an Area of Outstanding Natural Beauty (AONB).

Its habitats include grassland, cliffs, caves and woodland. It is home to important species, such as the lesser and greater horseshoe bats, dormice, peregrine falcons, great-crested newts and the Cheddar pink.

Conservation programmes at Cheddar include:

Regular monitoring of the bats in our caves

Monitoring and management of land to promote the habitat of pearl-bordered fritillaries (a species of butterfly)

Pond refurbishment, monitoring and land management to support all three species of newt

Land management to support dormice









Animal collections have an important role to play in wildlife conservation

Their role includes:

- Education and awareness raising
- Housing and caring for back up populations, and participating in conservation breeding programmes
- Supporting conservation projects in the wild



### Activities to try



#### **IUCN** red list



Discover more about the IUCN red list:

Click here

Choose three animals.

Look up their conservation status and find out more about them.



#### Watch some TV

Take some time to watch David Attenborough's new documentary series Perfect Planet, to increase your understanding of the planet and the challenges wildlife is facing.

Available on BBC iPlayer, <u>here</u>.





### **Working Together**

Animal collections work together on education programmes, breeding programmes and other conservation projects.

Visit the Association of European Zoos and Aquaria website.

Research about one of their areas of work and produce a poster to explain more about it.

Click here













Find out what these logos represent and how they can help you to conserve wildlife.



