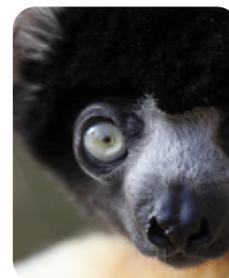


Key Stage 3 & Key Stage 4

CONSERVATION



General points about this talk:

Talks generally last 30-40 minutes and take place out in the Park in all weathers; please ensure that your pupils wear suitable clothes for the conditions.

Talks are normally led by the keepers and may vary between different staff members. We will adapt this talk according to the age of students.

We endeavour to keep group sizes fairly small as some of this talk may take place in busy areas of the park. To this end most groups will be kept below 20 students.

The meeting point for this talk will be advised at the time of booking.

What we will cover in the talk:

Conservation is the management of nature and biodiversity with the aim of protecting species, their habitats and ecosystems. The IUCN (International Union for Conservation of Nature) evaluates the extinction risk of thousands of species which are then ranked in a range from least concerned to extinct.

This talk will look at a number of different species facing various threat levels that we have here at the park. We will discuss the problems these animals face in the wild and ways that zoos and conservation bodies are trying to combat these threats. We may also discuss captive breeding and conservation programmes that the park is involved in.

Animals we may include:

We cannot guarantee which animals you will see during your talk but you will visit at least four animals which may include some of the following:

Humboldt penguin	Waldrapp Ibis	Clouded Leopard
Slender-tailed meerkat	Crowned Sifaka	Pink Pigeon
Asian short-clawed otter	Asiatic lion	Aldabra Tortoise



Common squirrel monkey	Lemurs	Rodrigues Fruit Bat
Azara's agouti	Bactrian Camel	Bali Starling
Aldabran giant tortoise	White Rhino	
Black-tailed prairie dog	Visayan Warty Pig	

Areas of the new National Curriculum that this talk addresses:

KS3

Biology

Genetics and Evolution:

- The importance of maintaining biodiversity
- Changes in the environment which may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction

Relationships in an Ecosystem:

- The interdependence of organisms in an ecosystem, including food webs

Geography

Human and Physical Geography:

- Understand how human and physical processes interact to influence and change landscapes, environments and the climate
- How human activity relies on the effective functioning of natural systems



KS4

Biology

Ecosystems:

- The importance of biodiversity
- Positive and negative human interactions with ecosystems

Geography

People and Environment:

- Resources and their management – An overview of how humans use, modify and change ecosystems and environments in order to obtain food, energy and water resources. Detailed study of one of either food, energy or water, recognising the changing characteristics and distribution of demand and supply, past and present impacts of human intervention, and issues related to their sustainable use and management at a variety of scales.



Areas of GCSE Exam Boards that this talk addresses:

AQA

Biology

4.7.2.4 Impact of Environmental Change:

- Students should be able to evaluate the impact of environmental changes on the distribution of species in an ecosystem given appropriate information.

4.7.3.3 Land Use:

- Humans reduce the amount of land available for other animals and plants by building, quarrying, farming and dumping waste.

4.7.3.4 Deforestation:

- Large-scale deforestation in tropical areas has occurred to: provide land for cattle and rice fields; grow crops for biofuels.

4.7.3.6 Maintaining Biodiversity:

- Students should be able to describe both positive and negative human interactions in an ecosystem and explain their impact on biodiversity.
- Scientists and concerned citizens have put in place programmes to reduce the negative effects of humans on ecosystems and biodiversity.
- These include:
- Breeding programmes for endangered species; protection and regeneration of rare habitats
- Reintroduction of field margins and hedgerows in agricultural areas where farmers grow only one type of crop
- Reduction of deforestation and carbon dioxide emissions by some governments
- Recycling resources rather than dumping waste in landfill

Geography

3.1.1.4 Climate Change:

- Climate change is the result of natural and human factors, and has a range of effects; Managing climate change involves both mitigation (reducing causes) and adaptation (responding to change).



OCR

Biology

Gateway	Twenty First Century
<p>Monitoring and Maintaining the Environment:</p> <ul style="list-style-type: none"> • B6.1B – Describe both positive and negative human interactions within ecosystems and explain their impact on biodiversity • B6.1C – Explain some of the benefits and challenges of maintaining local and global biodiversity 	<p>How is Biodiversity Threatened And How Can We Protect It?:</p> <ul style="list-style-type: none"> • B6.4.1 - Describe both positive and negative human interactions within ecosystems and explain their impact on biodiversity • B6.4.4 – Explain some of the benefits and challenges of maintaining local and global biodiversity

Geography

A	B
<p>Ecosystems of the Planet:</p> <ul style="list-style-type: none"> • 2.1.5 - Bio-diverse ecosystems are under threat from human activity <p>Environmental Threats to our Planet:</p> <ul style="list-style-type: none"> • 2.3.3 - Climate change has consequences 	<p>What Evidence Is There To Suggest Climate Change Is A Natural Process?:</p> <ul style="list-style-type: none"> • 2.1.C – Why is climate change a global issue





EDEXCEL

Biology

Ecosystems and Material Cycles:

- 9.9 - Explain the positive and negative human interactions within ecosystems and their impacts on biodiversity
- 9.10 - Explain the benefits of maintaining local and global biodiversity, including the conservation of animal species and the impact of reforestation

Geography

A	B
<p>Weather Hazards And Climate Change:</p> <ul style="list-style-type: none">• 2.3 – Global climate is now changing as a result of human activity	<p>Hazardous Earth:</p> <ul style="list-style-type: none">• 1.3 – Global climate is now changing as a result of human activity, and there is uncertainty about future climates <p>Forests Under Threat:</p> <ul style="list-style-type: none">• 8.3 - Tropical rainforest are threatened directly by deforestation and indirectly by climate change• 8.4 – The taiga is increasingly threatened by commercial development• 8.5 – Conservation and sustainable management of tropical rainforests is vital if goods and services are not to be lost for future generations• 8.6 – The taiga wilderness areas need to be protected from overexploitation

