



Introduction

The Threatened Species Trail will take you around the zoo and allow you to discover more about some of the threats affecting animals and the conservation work that is being done to protect them.

The status of how threatened an animal or plant species is comes from the IUCN Red List of Threatened Species™. This list places species into categories based on the number of individuals left and the threats that they are facing. The most threatened category where there are still some animals left is 'Extinct in the Wild'. This means that you can only find these animals in places like Marwell Zoo and protected reserves as there are none left in the wild.

There are 8 trail signs for you to find around the zoo. You can use the map at the back of this pack to help you find them. They look like this:

Amur leopard - a threatened species

Problems?

Hunting

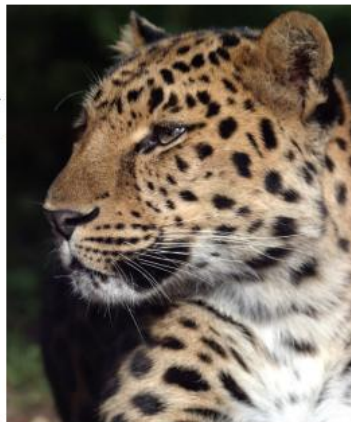
Amur leopards are hunted for their fur and for their body parts to be used in traditional Asian medicine.

Habitat loss

Logging, forest fires and the growth of human settlements have led to the deforestation of the Amur leopards' habitat.

Loss of prey

Over-hunting of the Amur leopards' prey means they sometimes visit deer farms looking for food. Farmers may shoot the leopards to protect their livestock.



What is being done?

Protected by law

Amur leopards are protected by CITES, an international agreement signed by nearly every country in the world. CITES controls the trade in animals, plants and their products.

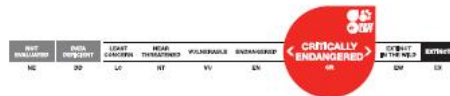
Reducing hunting

ALTA (Amur Leopard and Tiger Alliance) has established anti-poaching patrols to tour the Amur leopards' habitat. They have been successful in catching poachers and have confiscated firearms and skins and initiated criminal proceedings.

To reduce retaliation against leopards by livestock owners, ALTA offers them compensation for any loss of livestock to an Amur leopard.

Education

Through ALTA partner, Phoenix Fund, an education programme has been set up to raise awareness of Amur leopards amongst local people. It aims to reduce poaching and to encourage local people to report poaching and wildlife trade.



The mystery word

Collect a letter from each Threatened Species sign around the zoo and rearrange the letters to spell out our **mystery word**...

E	C	O	S	Y	S	T	E	M	S
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1. HUMBOLDT PENGUIN



a) i) **What is being harvested in some places to make fertiliser?**

Guano (penguin poo!)

ii) **Why is this causing problems for Humboldt penguins?**

Humboldt penguins build their burrows in guano. If there isn't enough guano they cannot construct their burrows, meaning their eggs and chicks will be more exposed to both predators and the weather.

b) **What can you do (or advise others to do) to help Humboldt penguins?**

Ideas can include: buy sustainable seafood, reduce your plastic use, participate in a beach clean-up, reduce the use of harsh chemicals, use less plastic, use reusable bags for shopping, save water and electricity where you can.

2. SOUTHERN WHITE RHINO



a) **Why are rhinos being poached for their horn?**

Rhino horn is used in traditional Asian medicine and for ornaments. More recently, rhino horn has been proposed as a cancer and hangover cure and is even becoming a status symbol in some countries.

b) **What is rhino horn made out of?**

Rhino horn is made from a protein called keratin - the same material as our hair and nails!

SOUTHERN WHITE RHINO CONTINUED...

c) What message is it important to share through education to reduce the demand for rhino horn?

There is no scientific evidence that rhino horn has any medicinal properties. It would be as effective as using nail clippings as a medical treatment!



3. AMUR LEOPARD

a) Why do Amur leopards sometimes visit deer farms looking for food?

Amur leopards' natural prey is being reduced due to over hunting by humans which means they sometimes visit deer farms in search of food.

b) What is being done to reduce the number of leopards being hunted?

Funding has been provided to compensate livestock owners for any loss of livestock to an Amur leopard.

ALTA and the Phoenix fund run an education programme to help educate locals about the Amur leopard with the aim to reduce unsustainable poaching.



4. GREVY'S ZEBRA



a) How are Grevy's zebra tracked in the wild?

Marwell Wildlife, along with other partner organizations, have been placing radio tracking collars onto a select number of Grevy's zebra in the wild to get a better idea of where the zebra are and how they move.

b) Why is tracking the zebra important for Grevy's zebra conservation?

Knowing where zebra go, where they graze and find water means conservation efforts can be focused in these key areas. This means conservation efforts can be more effective.

4. SCIMITAR-HORNED ORYX



a) What is the conservation status of the scimitar-horned oryx as assessed by IUCN?

Extinct in the Wild

a) What is a studbook used for?

A studbook is used as a general record of captive animals. It can also be used to give recommendations about which animals should breed together to maintain a healthy, genetically diverse captive population for a species.

SCIMITAR-HORNED ORYX CONTINUED.....

To maintain a healthy captive population, it is important to maximise the genetic variation within the population.

Below is some of the information that can be found for each captive animal in the scimitar-horned oryx studbook:



- Date of birth
- Sire (Father)
- Dam (Mother)
- Location of animal
- Sex of animal
- Date of death

b) Choose two of the above pieces of information and suggest how each would help studbook keepers when recommending which animals should breed together.

Date of Birth can be used to determine when a captive animal will be sexually mature.

Sire/Dam can be used to determine pedigree and to insure recommended breeding pairs are not closely related.

Location is important as the logistics of getting two potential breeding animals together needs to be considered.

Sex of animal is important when choosing a potential partner.

Date of death is important when considering the health of the population and the individual.

5. COTTON-TOP TAMARIN

a) What is threatening the last major stronghold for cotton-top tamarins?

Flooding from the construction of a hydroelectric dam is threatening the cotton-top tamarin habitat.

b) How does the conservation programme 'Proyecto Titi' aim to reduce agricultural pressures on the forest?

They provide local communities with training in alternative agricultural practices that are less detrimental to the forest.



7. PYGMY HIPPO



a) Pygmy hippos are protected under the CITES agreement. What does this mean?

It means that international trade of pygmy hippos and their products is controlled

b) Why is the legal protection for the conservation of pygmy hippos difficult to enforce?

Civil unrest and a lack of resources in the pygmy hippo range means it can be difficult to enforce the law.

Threatened Species Trail

1. Humboldt penguin
2. Southern white rhino
3. Amur leopard
4. Grevy's zebra
5. Cotton top tamarin
6. Scimitar-horned oryx
7. Pygmy hippo

