





## KS3 Threatened Species Trail

This resource pack consists of both the Teacher Guide (p.3 and 4) and the Student Booklet (p.5 and 6) for the Threatened Species Trail. When you have printed the Student Booklet pages, fold in half to make A5 booklets.

We recommend you look through the whole pack before you start, so you know what information to look for at each sign.

## Curriculum Links

### SCIENCE

#### **Interactions and interdependencies**

Relationships in an ecosystem

- how organisms affect, and are affected by, their environment, including the accumulation of toxic materials.

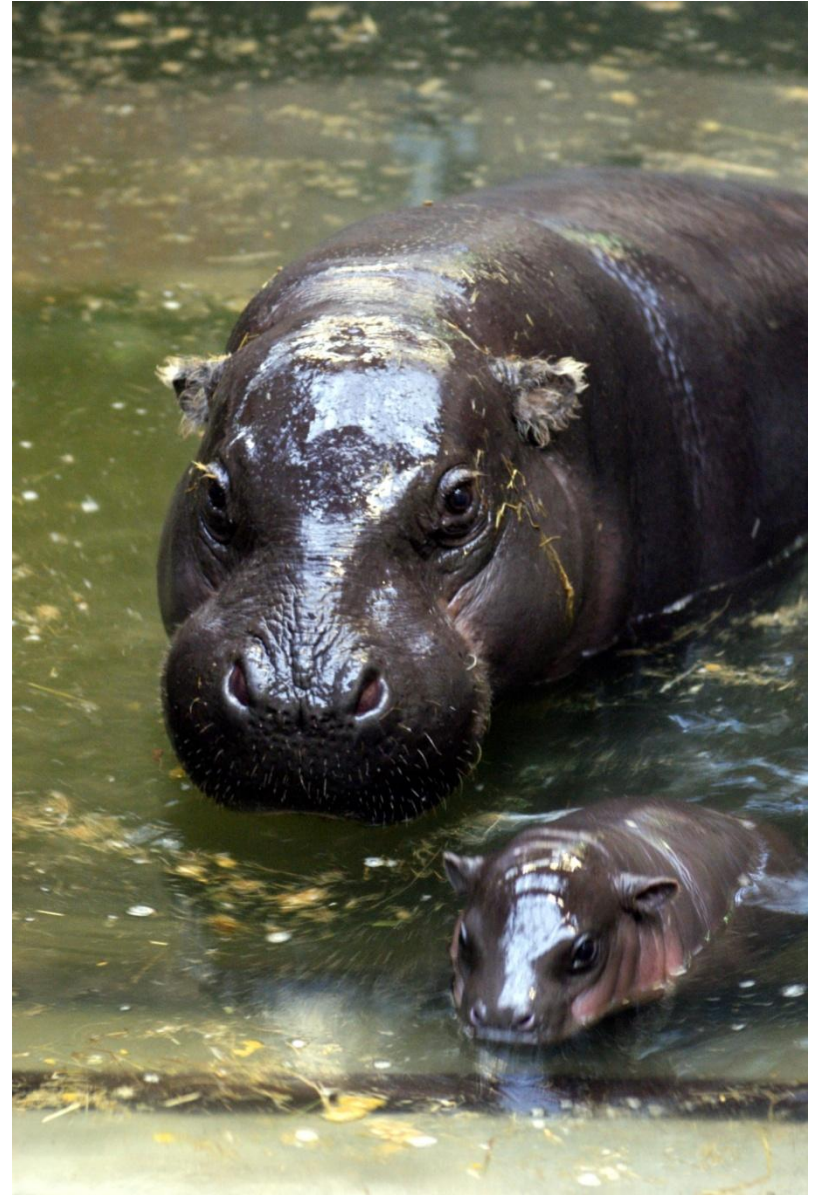
#### **Genetics and evolution**

Inheritance, chromosomes, DNA and genes

- changes in the environment 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
- the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material.

### GEOGRAPHY

**Human and physical geography**





**Marwell  
Wildlife**

## KS3 Threatened Species Trail TEACHER GUIDE

The Threatened Species Trail takes you and your pupils around the zoo, focusing on specific animals. You will discover more about some of the threats affecting these animals in the wild and the conservation work that is being done to protect them.



Information correct: 04/18.



### Trail Signs

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

As you go round the trail, your pupils can fill in the accompanying KS3 pupil booklet using the information on the Threatened Species Trail signs.

Please encourage your pupils to look through the whole booklet before you start, so they know what information to look for at each sign.



# Sign layout

The Threatened Species Trail signs look like the one below:

Problems on the left of the sign.

Solutions are on the right of the sign.

## 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

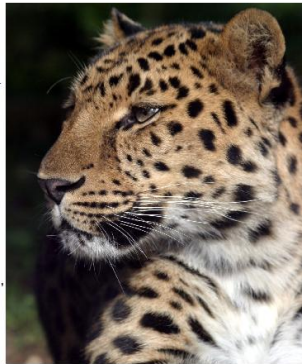
Logging, forest fires and the growth of human settlements have led to the deforestation of the Amur leopards' habitat.

#### 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.

More about Amur leopard  
(*Panthera pardus orientalis*)

[www.marwell.org/tst](http://www.marwell.org/tst)



### What is being done?

#### Protected by law

Scimitar-horned oryx 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

Anti-poaching patrols tour the Amur leopards' habitat. They have been successful in catching and deterring poachers.

To reduce hunting by local livestock owners, funding has been provided to compensate them for any loss of livestock to an Amur leopard.

#### Education

An education programme has been set up to raise awareness of Amur leopards amongst local people. It aims to reduce poaching and forest fires and to encourage local people to report poachers and fire starters.



The small icons can direct you to the correct part of the sign for that question.

The letter for the mystery word is found here.

The IUCN Red List of Threatened Species™ scale is found here and shows you the current status of the species (in red).

The mystery word is:

E C O S Y S T E M S

# Answers

- 1 = Political instability ✂ 2 = Competition 🐐 3 = Habitat loss 🌳  
 4 = Invasive species 🐛 5 = Hunting 🏹 6 = Overfishing 🐟  
 7 = Small range 🌍 8 = Loss of prey 🦌 9 = Pet trade 🐍



Buying sustainable seafood reduces the threat of overfishing so that **Humboldt penguins** have enough to eat.



**Grevy's zebra** benefit from protected areas in Kenya and Ethiopia.



ALTA tries to reduce the killing of **Amur leopards** by livestock owners.



**Rhino** horn has no medicinal properties. Sharing this message will reduce demand for rhino horn.

Pygmy hippos are being conserved by captive breeding programmes, the CITES trade agreement and by creating specially protected areas in its home range.

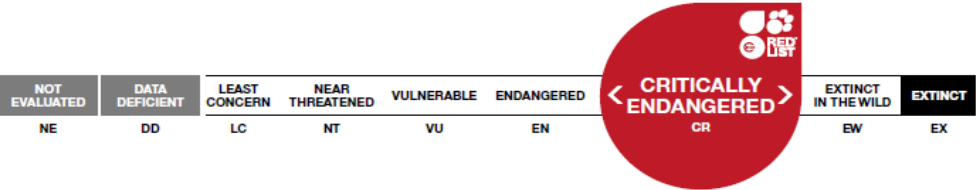
	LC	NT	VU	EN	CR	EW
Humboldt penguin			✓			
Southern white rhino		✓				
Amur leopard					✓	
Grevy's zebra				✓		
Cotton-top tamarin					✓	
Scimitar-horned oryx						✓
Pygmy hippo				✓		
Giant anteater			✓			

Ideas for how **you** can help save threatened species include: recycling, saving electricity, buying sustainably, not littering, feeding wild birds and reducing pollution.

The status of how threatened an animal or plant species is comes from the IUCN Red List of Threatened Species™. You can find the status on this scale on the trail signs:



# Threatened Species Trail



For each animal on the Threatened Species trail, tick what their current status is:

	LC	NT	VU	EN	CR	EW
Humboldt penguin						
Southern white rhino						
Amur leopard						
Grevy's zebra						
Cotton-top tamarin						
Scimitar-horned oryx						
Pygmy hippo						
Giant anteater						

## What can you do to help save threatened species?

Write your ideas in this box.



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

1

C

3

4

5

S

T










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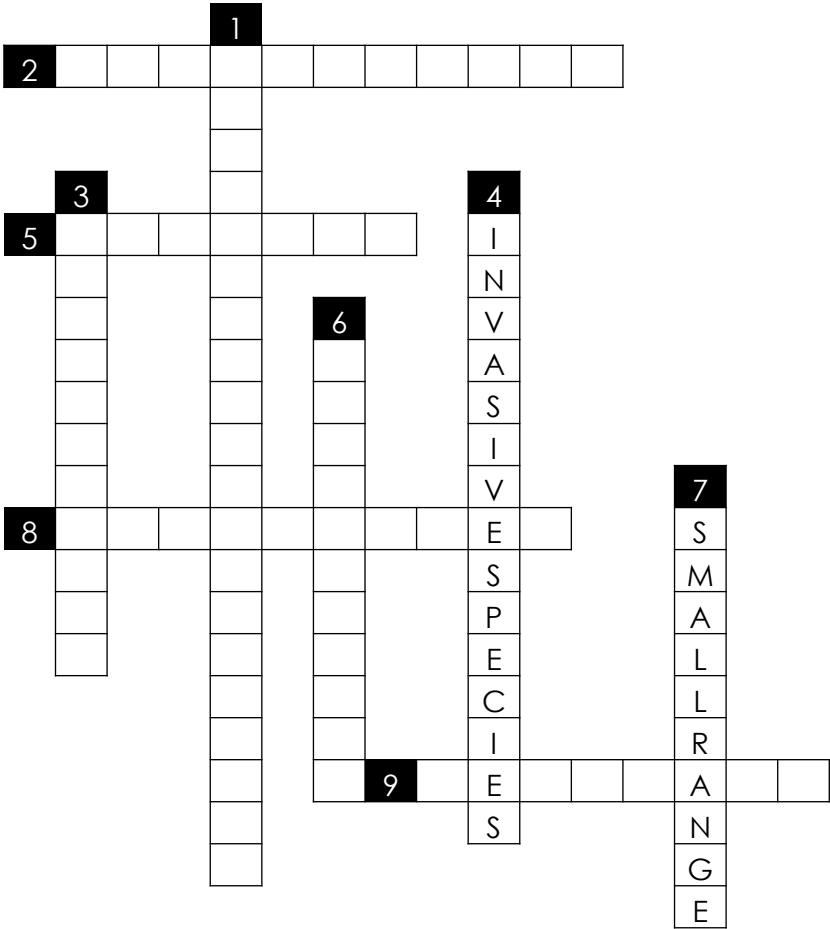
9

10

# Problems?

As you follow the Threatened Species Trail, record in the crossword below some of the problems that animals in the wild might have. Use the icons on the signs to help you.

- 1 = 
- 2 = 
- 3 = 
- 4 = 
- 5 = 
- 6 = 
- 7 = 
- 8 = 
- 9 = 



# What is being done?

Lots of different organisations, charities, and communities (including Marwell!) are now working together to help protect threatened species like the ones on this trail. Use the information on the signs to answer the following questions.



How does buying sustainable seafood help the **Humboldt penguins**?

\_\_\_\_\_



In which two countries do **Grevy's zebra** benefit from protected areas?

\_\_\_\_\_



How does ALTA try to reduce the killing of **Amur leopards** by livestock owners?

\_\_\_\_\_



What message is being shared about rhino horn and how will this help **southern white rhinos**?

\_\_\_\_\_

Name two things being done to conserve the pygmy hippo?

\_\_\_\_\_