BBC LEARNING ENGLISH

6 Minute English Saving the white rhino



This is not a word-for-word transcript

Neil

Hello. This is 6 Minute English from BBC Learning English. I'm Neil.

Sam

And I'm Sam. In this programme, we'll be hearing a news story linked to the 'Nature versus Nurture' debate, not concerning a human, but a rhinoceros!

Neil

The extremely rare northern white rhino of East Africa was on the brink of extinction when the second-to-last living male, Suni, died in 2014, leaving behind two females, Najin and Fatu - the last living creatures of their species.

Sam

Conservationists started an artificial breeding programme, using eggs from the females and sperm from Suni to produce an **embryo** – an unborn animal in the very early stages of development.

Neil

Recently there's been a new development in the story, but before we hear more, it's time for my quiz question. The name, 'rhinoceros', comes from the ancient Greek, but what exactly does it mean? Is it:

- a) thick skin?,
- b) horned nose?, or
- c) small eye?

Sam

That's a tricky one, because rhinos have all three! OK, I'll guess a) thick skin.

Neil

OK, Sam, we'll find out later. Now let's get back to the story of those precious northern rhino embryos.

Sam

Well, the good news is that so far five embryos have been produced. They're being frozen until they can be implanted in *southern* rhinos – the northern species' more common cousin.

Neil

Conservationist Thomas Hildebrandt runs the rhino breeding programme. He spoke to BBC World Service's, Science in Action, who asked him whether the embryos were genetically from the northern species.

Thomas Hildebrandt

Absolutely right. They're not **hybrids**, they're pure northern white rhino **embryos** which were generated with the desired breeding partner, Suni, who died in 2014. So we have embryos which have a very high quality – there's no **inbreeding** effect on these embryos, and it's so important to make the next step, to transfer these embryos because we can preserve life – biological material - in liquid nitrogen, but what we can't do – we can't preserve social knowledge and therefore we need desperately a **calf** on the ground so that these two existing northern white rhinos, can teach the new **calf** how to behave as a northern white rhino.

Sam

Having genetically pure embryos prevents the birth of **hybrids** – animals that have been bred from two different species.

Neil

It's also important the embryos have no **inbreeding** – breeding of a young animal from two closely related parents, because this can cause disease.

Sam

Fortunately, Thomas and his team have preserved five healthy and genetically pure northern rhino embryos in liquid nitrogen.

Neil

But while they can preserve 'nature', what Thomas's team can't provide is 'nurture' – the social knowledge that a young northern rhino – or **calf** – can only learn from other northern rhinos.

Sam

And since Najin and Fatu, the last remaining northern rhinos on Earth, are getting old, the race is on to breed a young rhino calf before they die.

Neil

The good news for the survival of the northern white rhino is that experiments to implant the delicate embryos in southern rhinos have been successful.

Sam

Here's Thomas Hildebrandt again talking about these recent experiments with BBC World Service programme, Science in Action:

Thomas Hildebrandt

We will, for sure, not wait until this pregnancy is completed because it takes 16 months for a full **pregnancy** in a rhinoceros. So if this embryo implants - and we can see that on **ultrasound** ... and - forms a nice placenta, that is the goal for us to proceed with the next step on the northern white rhino embryos.

Neil

Normally it takes 16 months for a female rhino to complete her **pregnancy** - the state in which a woman or female animal has a baby developing inside her.

Sam

But in the case of the northern rhino, the race is on to birth **calves** who can learn the rhino rules of social behaviour from Aunty Najin and Granny Fatu while they're still alive...

Neil

...which is why conservationists are monitoring the pregnancy using **ultrasound** - a procedure using sound waves to create images of internal body parts, or in this case, growing rhino babies.

Sam

It's an unusual episode in the ongoing 'Nature versus Nurture' debate.

Neil

And hopefully a big step towards restoring the northern white rhino population so that future generations get to see these magnificent creatures with their thick skin, horned nose and...

Sam

...and small eyes, Neil? So what was the answer to your quiz question?

Neil

Yes, I asked you what the name 'rhinoceros' meant. What did you say, Sam?

Sam

I guessed it was a) thick skin. Was I right?

Neil

Well, rhinos certainly do have thick skin, but their name actually comes from the Greek meaning, 'horned nose'.

Sam

Well, luckily I've got a thick skin too, so I won't take it personally! Let's have another look at the vocabulary we've learned, starting with **embryo** – an unborn animal or human still inside its mother's womb.

Neil

A **hybrid** is an animal or plant that has been bred from two different species.

Sam

Inbreeding is when a young animal is born from closely related parents.

Neil

A **calf** is the name for the young of several large mammals including cows, elephants and whales, as well as rhinos.

Sam

Pregnancy means being pregnant or growing a baby inside you.

Neil

And finally, **ultrasound** is used to see internal organs or a baby developing inside a woman.

Sam

That's all from this species-saving edition of 6 Minute English.

Neil

Goodbye!

Sam

Bye bye!

VOCABULARY

embryo

an unborn animal or human being in the very early stages of development, inside its mother's womb

inbreeding

when animals or people are born by breeding between closely related parents

hybrid

animal or plant that has been bred from two different species

calf

the young of several large mammals including cows, elephants, whales and rhinos

pregnancy

the state of a woman or female animal having a baby developing in their womb

ultrasound

procedure which uses ultrasonic sound waves to create images of internal body parts or babies growing inside the body