





# News from the zoo

with Dr Mark Pilgrim  
Chief Executive Officer



The good weather has finally arrived after a long and pretty grim winter. Animals are being born and we are set up for the season with the recruitment of almost 450 seasonal staff to help us provide a great experience for all our visitors.

I am delighted to tell you that we have recently had the birth of a beautiful okapi. Okapis have a fragile existence in their native home in the Democratic Republic of Congo, so this birth is extremely important to the European breeding programme. They are a delicate and sensitive species and it's great to see our dedicated and highly skilled animal care teams being rewarded with a special birth. This success was assisted by extensive studies by our endocrinologists into the hormone levels of female okapis, which provides us with an important indicator of when they are coming into season. This work is boosting the chances of reproductive success of many threatened species, both in zoos and in the wild.

Talking of such valuable work, I would like to take the opportunity to say thank you to all our members for your support. You are very important to us and it was a great achievement for us to welcome our 100,000th member over the Easter period. The number of active members has continued to grow since then, which is fantastic. You are part of a family of loyal supporters who are helping us continue our vital conservation work. Thank you.

Following a winter of building works, new things are happening around the zoo. A Goodfellow's tree kangaroo and dusky pademelon exhibit opened on Islands. Many people associate kangaroos with Australia, but Goodfellow's tree kangaroos and dusky pademelons come from Papua New Guinea, which fits in perfectly with Islands and the geographical areas the zoo is focused on. Being an evolutionary biologist, I personally really like this kangaroo species. There are no primates on Papua New Guinea, but possibly the last thing you'd think would

evolve to live in trees is a kangaroo!

We have been waiting a long time to develop Oakfield House. In many ways, George Mottershead's family home remains the heart of the zoo and is part of our heritage. We need to keep it as a useable space and recent renovations are being carried out with sensitivity to its history, to provide a great new food experience for visitors. We'll tell you more about it closer to the opening in late summer.

We're trying something a bit different over the summer with our Wild Worlds festival. There is lots of information about what you can expect in this issue of Z. I hope you are able to come and enjoy the varied programme of events that are planned around the new installations.

I was delighted to see the opening of our hugely extended Nature Reserve at the end of April. The zoo has a huge bank of land surrounding it, which George Mottershead originally put in place as a disease buffer zone between the animals here and neighbouring farmer's livestock. It's been a desire for a long time to use the land more effectively and I really wanted it to develop as a place where our UK wildlife could thrive. The green, lush countryside may look appealing, but heavily fertilised fields are poor for biodiversity and are usually rather bereft of wildlife. The first phase of the Nature Reserve was quite small. Phase two has increased it considerably, but we are still on the journey. It is the beginning of something which will stretch far into the future, as we continue working to make the whole area around the zoo a haven for UK wildlife – the conservation of which is as important to us as the conservation of species from around the world. The idea that no-one alive today will see it at its absolute best, when the oak forest has matured and the wildlife is thriving – that's a wonderful thing.

## Z MAGAZINE FEATURES



Captured on camera  
Page 4-5



Wild Worlds  
Page 8-17



Surprise new arrival  
Page 35

**Members' Days:**  
Friday 6 July 2018  
Sunday 18 November 2018

**Adopter Days:**  
Sunday 7 October 2018  
Saturday 9 March 2019

# Captured on camera

There has been great excitement at the zoo with the birth of a rare greater one-horned rhino this May – and it was captured live on CCTV!

The male calf arrived to 11-year-old mum Asha following a 16-month gestation and a 20-minute labour. Akeno could be seen getting to his feet to take his first wobbly steps before feeding for the first time shortly afterwards.

Zoo staff and visitors have enjoyed watching him since then, playfully bounding about behind his mum. This is only the second greater one-horned rhino to ever be born at the zoo. From very early on he has shown himself to be a confident and inquisitive young rhino and Asha is a superb mum. The newcomer is a big boost to the endangered species breeding programme that is focused on sustaining the greater one-horned rhino population.

**Tim Rowlands, Curator of Mammals, said:**

"Greater one-horned rhinos are a vulnerable species and every new calf is special. Rhinos around the world are under increasing pressure due largely to the senseless poaching of their horn. We need more people to be aware of their plight and join us in the fight to ensure these magnificent animals are around for the future. Asha's precious new arrival will hopefully go some way to keeping rhinos and the surrounding issues in the spotlight."

With the sad loss of Sudan, the world's last surviving male Northern white rhino this year, it's more important than ever that this newly born rhino is helping to create more awareness of the plight of his species.

**Mike Jordan, Collections Director, added:**

"At the end of the 20<sup>th</sup> century, the greater one-horned rhino was hunted almost to extinction and there were fewer than 200 in the wild. Thankfully, steps to protect them were taken just in time and today there are around 3,500 in India and Nepal.

"That number though is still desperately small and they continue to face threats to their long-term survival. It's therefore vitally important that we act for wildlife to ensure the population doesn't dip to critically low levels again."

## Rhino fact file

- Greater one-horned rhinos live in north-east India and southern Nepal
- The adults are characterised by their single horn, earning them the scientific name *Rhinoceros unicornis*
- They can weigh up to a whopping 2.4 tonnes
- Despite their bulky size, greater one-horned rhinos can run at speeds of up to 25mph
- They enjoy spending time in the water and are excellent swimmers
- Their thick hides look like body armour



# Seized birds given refuge

Chester Zoo has provided a safe haven for almost 100 exotic birds after they were seized from the illegal wildlife trade.

All 14 species of birds given refuge at the zoo were being sold illegally before being seized by customs officials in Europe as part of a collaboration against the trade. The illegal bird trade is a global issue with hundreds of species appearing in parts of Europe after being taken from the wild in Africa, South America and South East Asia.

One of the species, the scaly-breasted bulbul, is a songbird found in parts of South East Asia. It is classified as Near Threatened by the International Union for Conservation of Nature (IUCN). Songbirds in South East Asia in particular are on the very brink of extinction. Up to 1.3 million rare and remarkable birds are being captured each year and taken from their forest homes to be sold in markets. It's an excessive but deep-rooted consumption for trade, singing competitions, status symbols and even for traditional medicines, all pushing huge numbers of species to extinction and that's why our Sing for Songbirds campaign is so important, both at home and with partners in Indonesia.

While the other bird species that have arrived at Chester are listed as Least Concern by the IUCN, many of them are in decline in the wild as they fall victim to poachers and their habitats come under threat due to illegal logging, land conversion and forest fires.

The illegal wildlife trade is the fourth most lucrative global crime, worth many billions of pounds every year. Thousands of smuggled birds die in squalid conditions during their traumatic journeys across the globe. The surviving birds that have been given a suitable home across different areas of the zoo will help to inform our visitors about the illegal wild bird trade and some of them may also contribute to international breeding programmes.

Chester Zoo is working with partners in Indonesia on a number of community engagement initiatives so that local people, especially those living in villages close to forests, want to protect birds and understand their importance to the ecosystem. We are also working with partners around the world to combat the illegal wildlife trade, and you can help.

If you're travelling to South East Asia this year, make sure you download the Wildlife Witness smartphone app before you go. The app allows people to report suspicious instances of illegal wildlife trade they might witness while travelling.

For those of you holidaying elsewhere in the world, you can still be our eyes and ears on the ground. Report any suspicious activity via our online illegal wildlife trade reporting form. **Find out more at** [ACTFORWILDLIFE.ORG.UK/ILLEGALWILDLIFETRADE](http://ACTFORWILDLIFE.ORG.UK/ILLEGALWILDLIFETRADE)



The colourful black-browed barbet has a scattered distribution across south-east Asia. It excavates nest holes in trees but little else is known about its breeding habits.



The acrobatic orange-cheeked waxbills are native to western and central Africa. Their high-pitched 'peeps' are the best clue of their presence. Waxbills are named for the prominent red colour of their conical beaks, which are the same colour as sealing wax.



The scaly-breasted bulbul is a species of songbird found from the Malay Peninsula to Borneo. It is classed as Near Threatened by the International Union for Conservation of Nature due to the rate of forest loss from illegal logging, land conversion and forest fires.



# WILD WORLDS

at **CHESTER ZOO**

This summer, something different is happening at Chester Zoo. Wild Worlds is a one-of-a-kind celebration: a festival made for every one of us!

Discover **NEW** spaces within the zoo's favourite places, experience head-turning moments, breath-taking experiments and **POP UP** performers! Join us as we celebrate the **AMAZING** worlds of the zoo's **21,000** incredible animals and **BRILLIANT** gardens.

We want you to experience a whole new dimension to Chester Zoo, one we've created in collaboration with talented artists, landscape designers, scientists and entertainers. We've transformed some of our favourite spaces around the zoo into unique worlds, all of which have been inspired by the incredible work of our conservationists, scientists and the amazing wildlife found right here at the zoo.

Wild Worlds is here now and will be open until Sunday 30 September. There are 15 individual interactive installations for you to discover and explore, each designed and created exclusively for Chester Zoo. They are complemented by an exciting programme of events.

Explore a Botanist's Lab, relax on our oversized Talking Chairs, make new discoveries in our Dormouse Garden plus **LOOOOADS** more. This wide range of specially commissioned artistic collaborations has been designed to **INSPIRE** and provide mesmerising moments for **EVERYONE!**



## Transitions

Get a taste of Wild Worlds before you enter the zoo with a series of breath-taking new prints.

The entrance of the zoo has been transformed! You'll be welcomed by a colourful display of unique artwork – creating a fun festival vibe and a sense of excitement; kick-starting your Wild Worlds experience and visit to the zoo.

These beautifully detailed designs highlight our passion for nature and detail some unique habitats, telling the story of how they change throughout the course of a day, from daybreak to midday and then to the dark of night, as the amazing wildlife found within them also adapts.

With a touch of humour and intrigue, these dramatic pieces of artwork will have you mesmerised. See what wildlife you can spot within them.

Created by Badgers of Bohemia



## Honey Bee Garden

Get close to our buzzzzz-tastic residents at the zoo and discover more about natural bee keeping and why bees are so important.

Discover more about the magnificent life of bees and the awe-inspiring world of our fascinating flying friends by exploring our bee keepers' hut. Learn more about the challenges honeybees are currently facing and how we can help such a small but important species.

Watch them enjoying the surrounding gardens, flying in and out of their hives and collecting pollen and nectar, or get up close and take a peek through the window at what a living bee hive colony looks like.

Important note: Our bees are unlikely to sting. But if you are allergic to bee stings or aren't sure, you can avoid this area by taking alternative routes through the zoo.

Created by Helmut Lenke & Kerry Morrison



## Celebritrees

We've put the spotlight on some of the zoo's most intriguing trees species. Explore the wonderful world of incredible trees and let nature feed your senses!

We're rolling out the red carpet for a selection of our most treasured trees at the zoo. Highlighting their beauty and how it comes in all shapes, sizes and colours. We can't live without trees but they're often taken for granted. We want to cure this 'plant blindness' by drawing attention to their amazing features and what makes them so incredible!

Did you know an oak tree can feed more species of insect than any other tree? It also provides habitat for 30 species of bird and over 300 species of lichen!

Created by Richard Dawson



## What the Botanist Saw

Take a peek into the private goings-on in the plant world with our trio of intimate Victorian-style peep shows!

Three curious, unassuming vending boxes placed around the zoo entice you to take a close-up view of the private goings-on of the plant world. The piece is a series of nine fascinating animations, viewed in 3D through the specially created boxes. Viewers will discover a series of extraordinary moments in the secret lives of plants, where prey becomes predator, and orchids grow before your eyes!

What the Botanist Saw will provide brief moments of education and entertainment that will surprise and delight and have you coming back for more!

Created by David Appleyard & Illuminos



## The Botanist's Lab

Explore a unique garden that's filled with endless opportunities – bringing together science and nature, right in the heart of the zoo! You're invited to enjoy a wild and exciting horticultural world.

With a nod to a traditional science lab, which is the source of inspiration for this space, The Botanist's Lab has a 'student workshop' and 'research room'. It provides a fabulous learning and events space, and is also perfect for visitors wanting to explore along its meandering routes, full of weird and wonderful horticultural and botanical spectacles.

Created by Studio Unwired & BAND Architects



## The Awekids Grassland Village

This vibrant and playful audio-visual walk through will take you on a mini sensory safari which will leave you in awe of plants. You'll never look at them in the same way again!

Delve into the wild worlds of Chester Zoo's national plant collection of orchids, cacti and nepenthes with this multi-sensory, awe-inspiring delight! Feed your curiosity and discover the extraordinary sounds of plants, which have been recorded using sonic technologies and then turned into music. It's our very own plant disco!

The Awekids Grassland Village has been created to help cure 'plant blindness', revealing the fascinating and hidden lives of plants and their relationship with animals and people. Take your time to explore, interact and play. Enjoy being surrounded by unique sounds, colours and shapes and (re) discover the joy of plants!

Created by Fabric Lenny, Jason Singh & Steve Symons



## The Dormouse Garden

Jump into the secret and wild world of dormice and discover more about this tiny and adorable expert in the art of sleeping!

Inspired by the conservation work we do right here in the UK, this garden 'scratches beneath the surface' to reveal what the life of a dormouse is like through this playful, interactive installation. Immerse yourself in the sights and sounds of a dormouse and listen to some of our experts as they tell you more about their work in protecting this incredible animal.

This secretive species sleeps for three-quarters of its life and is rarely awake during the day- see if you can catch the sleepy dormouse symphony which plays once every hour. Through a combination of digital art, landscape design and interactive elements we invite you to delve into the world of this species that lives right on our doorstep. There are plenty of other surprises to discover in this space too!

Created by One Five West, Urban Wilderness & Landstruction

## Talking Chairs

Get comfy on our over-sized, beautifully designed armchairs and listen closely because each one has a different story to tell.

These larger-than-life, wing-backed sound booths will give you an insight into the wild worlds of flamingos, lions and black rhinos; entertaining you with their original themed stories as you look out at the animals close by. Suitable for all ages, each eye-catching chair sits within its own mini-garden that has been specially created and designed to reflect the tale you're being told. They're also a perfect photo op!

There are three chairs located around the zoo:

- The Feather Chair, which stands among pink and feather plants and can be found near flamingos.
- The Catmint Chair, which is set within a mini kitchen garden of herbs, vegetables and flowers and can be found near the lions.
- The Thornbush Chair, which is set against a thicket of spiky plants and can be found near the black rhinos.

Created by Jane Revitt

## ArthroPODS

Take a wander down Insect Avenue and see the mini and diverse wild worlds of some of the UK's smallest residents!

ArthroPODS is transforming the humble garden shed into inspirational invertebrate hotels. With a variety of room types, facilities and local amenities, these bug abodes will be a great attraction for a wide range of little critters. From woodlice and worms wanting to get cosy in the dark and damp lower floors, right through to the penthouse suite which has small spaces ideal for bumblebees looking to start a family. ArthroPODS will showcase how their 'guests' will change throughout the seasons, whether they're looking for overnight accommodation, some shelter from the wet weather or hibernating through the winter.

The pods highlight just how amazing all insects are and the important roles they play. Observe the tiny worlds of our native minibeasts and discover new facts along the way.

Created by Jacqui Symons & Richard Dawson





# Connecting WILD WORLDS at ZOO and you

We love to involve our visitors in what we love at Chester Zoo! And because people are inspired by different things, to do that we need to get creative about how we highlight our mission of 'preventing extinction' and come up with new and interesting ways to inspire our wonderful visitors to ACT FOR WILDLIFE.

Here, Chester Zoo's Head of Discovery and Learning, Charlotte Smith, tells us what she hopes our visitors will gain from Wild Worlds at Chester Zoo, and why we use art and creative thinking to get people excited, intrigued and interested in conservation and science:

"Conservation requires all of us to do something! We know that one of the precursors to people taking conservation action is their ability to connect with nature; that feeling you get of environmental responsibility, of wanting to do something for nature, often starts with loving and understanding it.

"Our modern day, city living can get in the way of us making those connections. Projects like Wild Worlds provide the opportunity for precious moments to sit in garden spaces, to understand wildlife, to enjoy being around plants and animals, and to have that opportunity to connect with nature. As well as inspiring people to take action for wildlife, there's lots of research that highlights how important that is for our own wellbeing.

"There's been quite a lot of publicity recently around the lack of opportunity for children to spend time in nature, so much so that language is changing; words like 'acorn' and 'buttercup' and other words associated with the natural world have been dropped from the Junior Dictionary in favour of words linked to technology or social media networking, which represent what their experiences are like now. With Wild Worlds and, more broadly, with our education work at the zoo, it's really



important that we don't just reintroduce the words but that we reintroduce the experiences and underpin them.

"Wild Worlds has been designed to have something for every age group, from young children to teenagers and parents, as well as for individuals - something for everybody! To make that work, we use as many ways as we can to communicate science and conservation messages creatively to our many different audiences.

"We really enjoy working in collaboration, particularly with artists – whether that's performance artists, visual artists, theatre practitioners or dancers. They bring us exciting and fresh ways to tell our stories, both in the zoo and in communities through our outreach programmes. Conservation, and the science we do to support it, can sometimes be quite a complex story to tell, but I think art encourages thought and reflection - a way of making sense of the story. It can encourage different audiences to think critically about why conservation matters to all of us and to our future on the planet.

"An interesting add-on to our working with artists is that quite a number of them are inspired to take on those conservation challenges and share the messages through their blogs and through other projects they take on. They help us to build up a network of people that care passionately and want to encourage others to think critically about conservation.

"Through Wild Worlds, I hope our visitors will have a great day out and that they too will find something to inspire them; whether that's a conservation story told in a new way, an opportunity to sit and contemplate in the gardens, or a mind-blowing performance inspired by our conservation science!"



# WILD WORLDS CHESTER ZOO

Let your imagination roam wild

SAT 26 MAY -  
SUN 30 SEPT



This summer join Chester Zoo for a festival like no other. Turn the world on its head and see things differently. Look. Laugh. And learn!

Book on line today at [chesterzoo.org](http://chesterzoo.org)

# SPRING COMPETITION WINNER

In the previous issue of Z we asked you to help us bring animal stories to life through our short creative writing competition. We wanted you to share your favourite Chester Zoo story with us, in 500 words or less! We had a great response from you and it's been fun reading through the entries we received. The winner of our competition is eight year old, **Sydney Carpenter**, who told us the inspiration behind her short story: "I liked the painted dogs at the zoo so I wrote a story about Hasani on an adventure!" Read her story below...

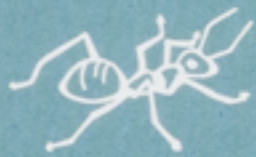
## HASANI'S FIRST ADVENTURE



One sunny day a young **painted dog** pup called **Hasani** came out of his den for the first time. He started on a slow walk across the sandy bank, until he came across a small sandy hill. And some **ants** came out and said to him "Please can you help us carry a big leaf?" The **little pup** a bit scared still said yes. And carried not one, not two, not three or four but five leaves, the ants said thank you and the **little pup** left.

Shortly after he came across a pond and found **three little fish** and the fish said to him. "Please can you help drag that twig to complete our den?" He said yes and it took him three minutes to do it. The fish thanked him and again he left. This was turning out to be the **best first day ever**.

He was walking along again when he spotted a **male sparrow** he looked upset. He went over and asked the sparrow what was wrong. The sparrow said: "I was collecting sticks for our nest but I dropped them.



The pup asked, "Do you need help picking them up?"

"Yes please," the sparrow said so the pup helped Mr Sparrow pick them up and gather a few more things to finish the nest. Mr Sparrow and Mrs Sparrow **thanked him** and again he left.

He carried on walking until he headed for home. But when he got back, it was quiet and then everyone jumped out and said, "**Surprise!**" And like magic a party table appeared and he saw the ants, the fish in bowls full of water and Mr and Mrs Sparrow who he helped earlier. And his mum said "You were very kind and helpful before so we planned a party for your **kindness**, and everyone's got a **surprise** for you."

First up were the ants and their gift was a piece of meat. The fish gave him a toy bone and the sparrows gave him a special stick. He thanked them all and from then on, they were all **friends**.

The End!  
By Sydney Carpenter



Keep an eye out for our next competition in the next issue of Z.



CHESTER ZOO

# WILD WORLDS

## Discover more about the science at the zoo

Join our fab Zoo Rangers as they demonstrate the varied and amazing science work we do in The Botanist Lab! Some of the exciting activities include:

### Endocrinology

The clue is in the pool! Drop in and find out how we use poo science to help save species.



### Animal Enrichment

From puzzle feeders to scent trails, get hands on with our activities and discover how we keep our animals both physically and mentally fit and healthy by using enrichment.

### Animal Training

Weighing elephants and measuring rhinos – it's all in a day's work for our keepers! Discover how we monitor the zoo animals and give health checks in this interactive session.

## Meet the Scientists

We're also running a series of activities with our science team in The Botanist's Lab – from answering your conservation career Q&As to explaining the science behind conservation breeding!

### Magnificent Meadows

Thursday 21 & Thursday 28 June

Join us to learn more about our local flora and the importance of meadows

### Camera Traps and Biodiversity Surveys

Thu 26 & Fri 27 July and Tue 18 & Mon 24 September

Ready to become a field conservationist? Meet our Field Programmes experts to learn how to set up biodiversity surveys and have a go at trying to identify some exciting species recorded on our camera traps in South East Asia and Africa.

### Palm Oil Q&A

Monday 2 & Monday 9 July

The growing oil palm industry and unsustainable production of palm oil is one of the biggest threats facing the forests and wildlife of Borneo and Sumatra – and demand is increasing. Join our experts for a Q&A session on palm oil and learn how you can make a difference!

## Meet Dolly the Giraffe

Saturday 25, Sunday 26 & Monday 27 August

Look out for Dolly the LIFE-SIZE giraffe puppet as she wanders around the zoo! Become a mini Chester Zoo Keeper and meet Dolly the VIP giant giraffe puppet! You'll get the chance to feed her and learn all about the wonderful world of giraffes with our fantastic Zoo Rangers.

## Buzzing Garden: Live Encounters

Saturday 4 & Sunday 12 August and Saturday 1 & Saturday 29 September

A sensory spectacle delivered by the artists behind the Honey Bee Garden. The performances bring together all elements of natural beekeeping into a truly unique interactive performance.

## Tree, Plant, Bee and Mi

Saturday 28 & Sunday 29 July and Saturday 18 & Sunday 19 August

Meet Tree, Plant, Bee and Mi Mi the gardener - four new and SURPRISING characters based on the AMAZING and rare plant collections found right here at Chester Zoo. This piece of theatre, performed by our friends The Denbigh Workshop, was inspired by the zoo's conservation work and the fabulous Horticulture and Botany team who care for the hundreds of plant species and stunning gardens at the zoo.

PLUS LOADS MORE! We have too many to include in this issue, but you can find a full list of our Wild Worlds events on our website: [CHESTERZOO.ORG/WILDWORLDS](http://CHESTERZOO.ORG/WILDWORLDS)



## JUNIOR MEMBERS' EVENTS

### THE GREENWOOD CENTRE SATURDAY 23 JUNE

Back by popular demand! The Greenwood Centre, situated in the foothills of Snowdonia, is an amazing park that offers fun and games outdoors; including den-building, and various self-propelled 'rides'. Definitely one not to be missed!

We'll meet at Cedar House (second staff entrance on the left as you are coming up Caughall Road from the Upton traffic lights) at 9.30am and return at 5pm. Bring a packed lunch.

### HOW TO BE A GOOD ZOOKEEPER THURSDAY 26 JULY

This is a unique opportunity offered to junior members to spend a day working alongside a Zoo Keeper. Come prepared for a hard day's work. The activities can be tough and demanding so we strictly limit this event to those junior members of 12 years old or over. We try to match juniors with their favourite section, but places are limited so this cannot be guaranteed. Owing to the zoo's biosecurity measures, it is important that the clothes you wear to work on the sections have not been in contact with any farm animals, or even your pets at home, since they were last washed.

We will meet outside Oakfield House at 10.30am, and the day will finish at 4pm. Please bring a packed lunch. Please note: bookings for this event will not be taken before 9am on Thursday 12 July 2018, (01244 650215) and will be strictly on a first-come, first-served basis.

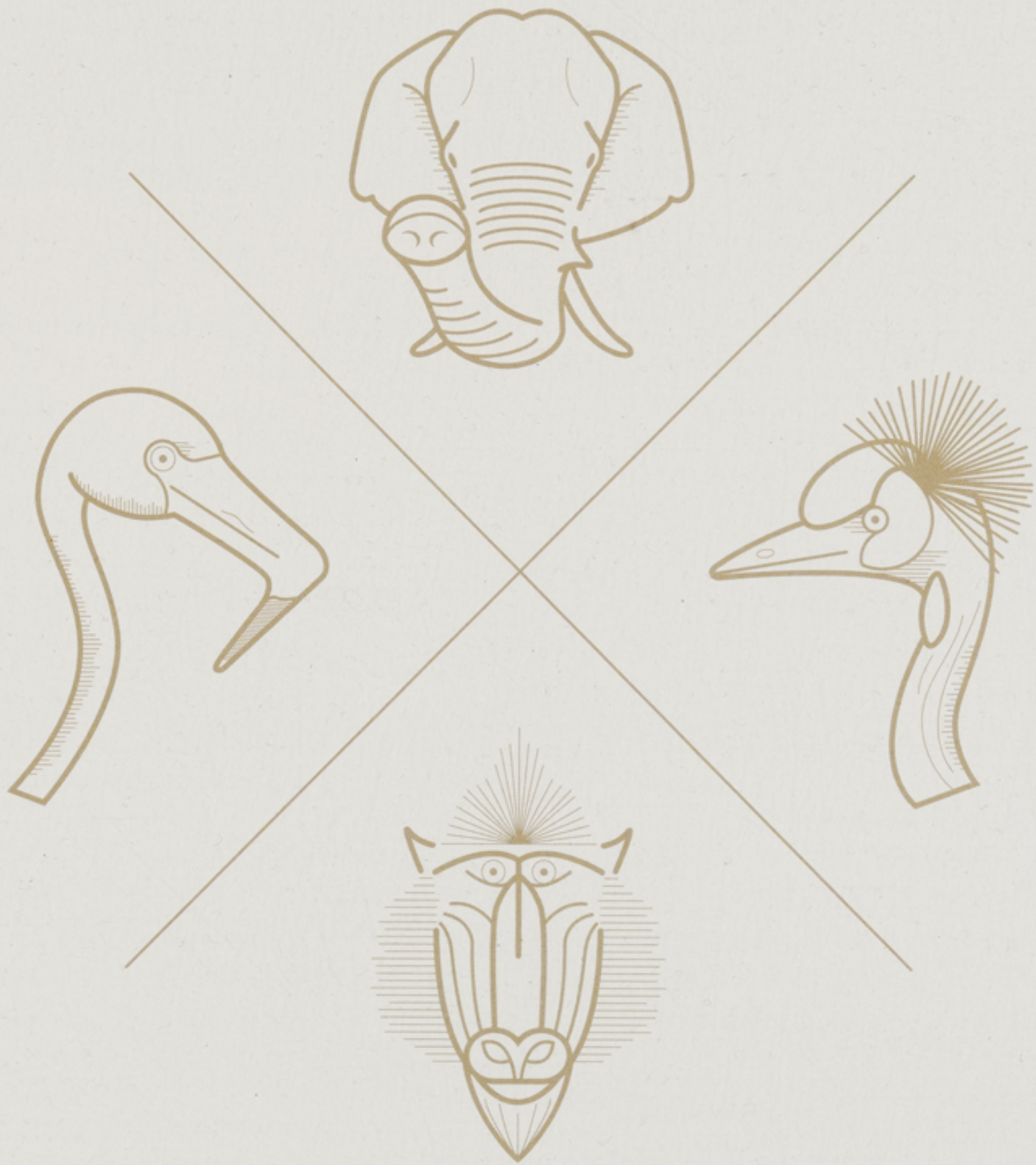
### JUNIORS' SUMMER BARBEQUE THURSDAY 2 AUGUST

This is your opportunity to be in the zoo when there are no other visitor noises to distract you and the animals. We usually aim to split into groups and tour the collection at night – a unique experience to see the animals during the evening. We aim to have the tours whatever the weather!

Join us for a 7pm start, at the main entrance. Parents are asked to collect junior members from the main entrance at 9.45pm.

Please note: bookings must be made for all Junior Member events. Please ring Penny Rudd at the zoo on 01244 650215, not more than two weeks before the event you would like to attend.





# THE OAKFIELD

COMING SOON



## Hop along to Islands

**A new resident has bounded into her new home on Islands – Sangria the Goodfellow's tree kangaroo.**

This is the first time in our history that we have had this species at the zoo and 15-year-old Sangria has moved into a new space on our South East Asian Islands zone.

With just 23 of them being cared for by zoos in Europe, Sangria will become part of a global conservation breeding programme for the species, which is in grave danger of becoming extinct in the wild.

As the name aptly suggests, the Goodfellow's tree kangaroo is a tree-dwelling marsupial, native to the mountainous rainforests of Papua New Guinea. They use their tails to hang from branches, and for added balance when jumping – they can leap up to 9 metres in a single bound.

You may notice that Sangria has long, curved claws; along with her rubbery soles, they help her to grip the trees when climbing and hopping about.

The species is under threat from hunting and habitat destruction in its homeland and around half of its population has been lost in the last 30 years.

**Mike Jordan, Collections Director at Chester Zoo, said:**

“Sadly, these remarkably charismatic and interesting animals are teetering on the brink of extinction. Hunting and local deforestation for timber and agricultural clearance have severely reduced their range and subsequently their numbers.

“We really hope that Sangria, in her new home, will help us to create some much needed awareness of the species and its plight in the wild.”

Sangria will live alongside a pair of dusky pademelons – a rare species of miniature wallaby. Other species also making their first appearances in our Islands zone include Prevost's squirrels, cloud rats and tree shrews.

# Protecting painted terrapins

Populations of the critically endangered painted terrapin are getting an important boost thanks to the work of our partner project with the SatuCita Foundation in Indonesia.

It may be one of the largest living fresh water turtle species, but the painted terrapin is on the verge of extinction. It is now found only in small, isolated populations, and conservationists believe the beaches and rivers of the Aceh Tamiang District of northern Sumatra are the last stronghold for the species in Indonesia. That is where the SatuCita Foundation has established a head-starting conservation facility for the painted terrapin, to protect the eggs from people and predators and help wild populations to recover.

Since the facility was set up in 2011, this non-profit organisation has provided a safe environment for the terrapins to hatch and grow, which has resulted in the release of 1,204 hatchlings and juvenile terrapins into the wild.

**Joko Guntoro, founder of the SatuCita Foundation, said:**

"During the most recent nesting season in the first months of 2018, we found one nest containing 24 eggs in the District of Langkat. This is the first time in eight years that a nest has been secured in this area and it was an exciting find for us. The successful hatchlings will help to restore the wild population in Langkat."

To help ensure the painted terrapin population is in good health, Joko came to Chester Zoo in May for some hands-on training with our vet Javier Lopez. He was shown how to carry out health checks, take blood samples and give the terrapins, and other turtles, a thorough examination.

Joko said: "Chester Zoo is a big partner, not only financially, but for the technical advice and support it provides."

"We don't have a vet or an expert in health checks at the project, so it is really valuable to be able to spend time with Javier and to speak with other knowledgeable people at the zoo. I've learnt some important skills which I will be able to apply back at the project to ensure rescued turtles, and juveniles that are ready for release, are returned to the wild in the best possible condition."

You can come and see the painted terrapins at Chester Zoo. Our safety net population, and the knowledge we gain from them and with our partners out in the field, helps to improve the future outlook for this species.



# The fab four

Some very furry felines are the first of their kind ever to be seen at Chester Zoo.

Pallas's cats may only be the size of a medium-sized domestic pet, but they are a big deal for our carnivore experts who are caring for them.

Not yet a year old, the four brothers have arrived in the UK from Krakow Zoo in Poland.

Relative to their size, Pallas's cats have the longest, densest fur of any cat species. Their beautiful colouring helps them to blend in with their rock refuges but, out in the open, they scamper across the ground on their short legs before crouching flat and motionless on the ground, so they look like a rock! Sadly, hunting for their fur is contributing to their perilous plight in the wild.

Pallas's cats are rarely seen in their native homelands of southern Siberia, Central and Eastern Asia and China where they are under threat. Spread across a range of more than 2 million square kilometres of exposed grasslands and montane steppe, it's estimated that just 15,000 of these wild cats remain. Conservationists fear that number is in continuous decline.

As well as hunting, they have been pushed to near-threatened status in the wild by the break-up of their habitat, an increasing human population and the disappearance of one of their preferred prey items the pika (the inspiration for Pikachu), which are poisoned in large numbers as they are viewed as pests.

**Mike Jordan, Collections Director at Chester Zoo, said:**

"Pallas's cats have a vast range so it's a truly shocking statistic that only 15,000 are estimated to remain and as many as 2,000 are being hunted every year.

"Now is the time to secure the Pallas's cats' future and prevent it from extinction. The arrival of this new quartet at Chester Zoo is part of the endangered species breeding programme designed to be an insurance safety-net in the face of continuing decline. Zoos, field biologists and scientists are working together to help these wonderful animals through conservation breeding, research, education, fundraising and possible reintroduction to the wild in the long term."

Pallas's cats may have a reputation for being grumpy thanks to their round heads, flattened faces and low set ears, but these enigmatic, expressive cats are set to become firm favourites at the zoo.

# Meet Semuliki



The safe arrival of a wonderful okapi calf to first-time mum K'tusha is great news for conservationists, and for the survival of this shy and little-known species.

This is also the first calf at Chester for dad Stomp. Their welcome offspring – a male – has been named Semuliki by keepers, after the Semuliki National Park in Uganda, where zoo experts have recently led surveys looking for signs of these rare animals.

The okapi's zebra-like stripes on its front legs and hindquarters provide great camouflage in their rainforest homes, but take a look at their heads for a clue as to their actual relatives. Okapi are the closest and only living relative to the giraffe.

K'tusha is proving to be a very relaxed and attentive mum to her little calf – one of only 71 okapi in European zoos.

For a long time, their solitary and shy nature, as well as their acute sense of hearing and ability to stay hidden, kept the okapi relatively safe in the deep forests of the Democratic Republic of Congo (DRC). Today, however, despite them being a national symbol and protected under Congolese law, the biggest threat to the okapi is hunting due to the presence of illegal armed groups and a growing bushmeat trade across nearly all of the okapi's range. This insecurity is a major hurdle to effective conservation action in those areas.

**Stuart Nixon, the zoo's African Field Programme Coordinator and member of the IUCN's Giraffe and Okapi specialist advisory group, said:**

"Along with the Uganda Wildlife Authority and with the support of the Giraffe Conservation Foundation, we are carrying out surveys in the Semuliki National Park in a bid to discover more about these fascinating animals and to determine ways of protecting them. Camera trap technology is allowing us to learn more and more about the behaviour of rare, elusive species such as the okapi.

"We are also supporting rural communities in the Maiko region of DRC to monitor okapi populations in their ancestral forests outside of protected areas and to develop ways of conserving them. Together with our partners, we are striving to ensure there's a future for these beautiful, gentle creatures."



## Saving one of the world's rarest amphibians with the help of a Mexican university and a convent of nuns...

An unlikely collaboration has developed to save one of the world's rarest amphibians from extinction. We're working with the Michoacana University of Mexico, a Mexican government fisheries centre and a group of Mexican nuns, to develop a breeding programme for the critically endangered Lake Pátzcuaro salamander.

The species is of great importance to the locals who have lived alongside it for hundreds of years but the latest research has led to fears that fewer than 100 individuals may remain. However, researchers hope the establishment of this first breeding network for the salamanders will boost numbers and quickly establish a genetically viable population which will, in time, re-energise the wild population.

The species is a unique type of salamander, as it spends its whole life in its larval form so, instead of evolving and migrating to land, it keeps its gills and lives in fresh water.

We're home to six breeding pairs of the salamander, with a further 30 adults located in the city of Morelia in south-west Mexico at the Michoacana University of Mexico and at a government fisheries centre. Another, genetically important colony is at a monastery in the small Mexican town of Pátzcuaro, home to 23 nuns.

The Sisters of the Monastery of the Dominican Order have been caring for a clutch of the salamanders for more than 150 years! Traditionally, the nuns and people living in the local communities harvested the salamanders from Lake Pátzcuaro - the only place in the world in which they were once commonly found - and used them to create a special cough medicine.

A combination of introduced exotic fish, destruction of forest which has altered the shoreline of the lake, and over-exploitation as a local dish, has pushed the salamanders to the brink of extinction. The nuns turned to breeding them in their convent to

keep alive both the species and their traditions.

**Dr Gerardo Garcia, the zoo's Curator of Lower Vertebrates and Invertebrates, said:**

"The Lake Pátzcuaro salamander is a very unusual species that is perilously close to the edge of existence. Immediate action is required if we are to establish more numbers and save them.

"When visiting Mexico in 2014 we had the opportunity to meet the nuns. They deserve enormous credit in keeping this species alive and we now believe that the population they are looking after is one of the most genetically viable populations in the world.

"Now, in partnership with the Sisters, a European network of zoos and the Michoacana University, we are fighting to breed a thriving population for eventual reintroduction back into the wild."

Conservationists have already begun projects to determine the status of the salamander population remaining in the lake, assess water quality, the availability of prey items, monitor potential health issues and encourage communities surrounding the lake to join the efforts to bring back the species.

**Professor Omar Dominguez, from the Michoacana University of Mexico, added:**

"This wonderful partnership between international zoos, ourselves and local communities in Mexico is giving the salamanders new hope in its fight for survival. Local people have joined the breeding network; local fishermen are part of the research efforts on the lake; villagers are engaging in conversation about the importance of thriving aquatic wildlife - and now the international conservation community is joining the bid to save this magnificent species."



## Chester Zoo's Nature Reserve expansion

**Chester Zoo conservationists have unveiled a 60,000 square metre Nature Reserve, providing protected habitat for threatened UK wildlife. The site was opened by TV presenter of Channel 4's Wild Things, Dr Trevor Dines.**

The initial reserve was officially established in 2013. It is already home to a wide range of incredible local and national wildlife, including kingfishers, hedgehogs and harvest mice, as well as the occasional report of other species like otters.

Part of the Nature Reserve is designated as a Local Wildlife Site for the important plants, birds and invertebrates recorded there. The new area is a 600% expansion, providing a new and larger protected habitat for vulnerable species.

**Chester Zoo's Biodiversity Officer, Sarah Bird, explains:**

"This area was formerly used for agriculture, but over the past two years we have been carefully restoring it to allow nature to move in and thrive. It now comprises wildflower meadows, ponds, beetle banks, log piles, trees and a reedbed, with a hide for viewing the wildlife.

"Linking into the strip of wetland along the canal, the reserve provides a new wildlife refuge at the zoo, and creates a natural corridor for species to move through the landscape. We hope visitors will enjoy it too – and if people are inspired to act for wildlife at home in their own gardens then even better!"

Sadly, across the UK, familiar and formerly widespread species such as water voles and the small tortoiseshell butterfly are declining sharply. They are just a fraction of the species facing extinction in the UK, which could benefit from the reserve.

Wide hedges, meadows and rough grassland at the reserve will be carefully managed to help species such as the hedgehog, which appears to be declining in the UK at the same rate as

tigers are globally – at around 5% a year, in both rural and urban habitats.

The new Nature Reserve meadow will help bumblebees and many other pollinating insects that are currently struggling in the UK. Half of the nation's 27 bumblebee species are in decline and three UK bumblebee species have already gone extinct.

Most UK bat species have seen populations fall in the last 100 years, but conservationists at the zoo have already seen bats feeding over the new meadow and ponds at the reserve and have installed bat boxes in trees nearby.

The Nature Reserve will also provide a boost to British wildflowers. They are important to healthy habitats, yet one-in-five of Britain's wildflowers is threatened with extinction and our flora is the least protected or invested in part of our wildlife heritage.

**The reserve is being officially supported by Dr Trevor Dines. He said:**

"With over 97% of our wildflower meadows destroyed since the last world war, everything we can do to put some colour back into the countryside helps. The new meadow at Chester Zoo is a thrilling example, which contributes to a total of 2008 acres of new meadows created through HRH Prince Charles' Coronation Meadows project. I can't wait to see flowers like yellow rattle, red clover and knapweed appear, providing valuable nectar and pollen to bees, butterflies and other pollinators."

The Nature Reserve has been part funded by a grant of £49,144 from WREN's FCC Community Action Fund. WREN is a not-for-profit business that awards grants for community projects from funds donated by FCC Environment through the Landfill Communities Fund.



# Celebrating our 100,000th member!

## **Chester Zoo is celebrating a momentous milestone - its 100,000th member!**

It's an all-time high for the zoo's membership scheme and with great benefits to be had from opting for hassle-free, automatic renewal, numbers are continuing to grow.

### **Head of Marketing, Jenny Tegg, said:**

"Thanks to all of you, our valued members, for making our membership scheme such a success. We're absolutely delighted and your wonderful support is so important to us.

"The team have been flat out explaining the benefits of the scheme, which is not only exceptional value, it has the added benefit of contributing directly to the conservation and education work we carry out here and with our partners around the world. Our members can feel very proud of what they are helping us to achieve."

The zoo's lucky 100,000th member was Kirsty Witham from Bebington, Wirral. She has been awarded a special, honorary lifetime membership to the zoo, and she couldn't be more pleased. She said:

"It was quite a shock to be told I would be gifted a lifetime membership, but such a nice surprise! I have happy memories

of coming to the zoo as a child and now my children love to visit here, too. With our family membership, we can enjoy coming here together more often. There's such a lot to do and it seems there is always something different to see.

"Since we've become members, a friend of ours has joined, too, and my sister is thinking of signing up for it. It seems like everyone wants to get the benefits of membership!"

### **Jenny Tegg added:**

"The 21,000 animals alone are reason enough for visitors to keep returning again and again. Add to that daily talks from our Zoo Rangers, fabulous play areas and a full programme of family-friendly, seasonal events, and I'm sure you'll agree, there is so much for people to see and do while they are here.

"This is such a special place and it's wonderful that so many people are choosing to join our family of members. Thank you."

### **Did you know**

We will reduce the price of new memberships by up to 10% if you provide your bank details so we may collect a Direct Debit payment for next year's membership renewal – with no obligation to renew.

# Talking Conservation...

Autumn 2018  
Programme

If you'd like to find out more about the vital work your membership supports both at the zoo and out in the field, then why not join us at one of our membership talks.



Wednesday 12 September

## WILDLIFE CONNECTIONS: ENGAGING WITH LOCAL COMMUNITIES FOR UK WILDLIFE

Join Chester Zoo's Community Engagement Manager, Hannah Brooks, as she tells us more about our Wildlife Connections project, which launched in 2016. The project is working to create safe spaces for the most precious local wildlife that we love. This year we're celebrating with our third Wildlife Connections festival on Friday 14 and Saturday 15 September. At this talk, we'll tell you all about the festival and share some inspirational stories about the work being done by our community partners to help UK wildlife and to get more people taking action.

Thursday 4 October

## ENGAGING WITH COMMUNITIES: NEWS FROM THE FIELD

In October, the zoo is hosting a training week for 12 educators from our field programmes, from as far afield as Indonesia, Mauritius, Bolivia and Kenya. Our Discovery and Learning team will be sharing a wide variety of our work with them to help them plan their own educational activities in the field projects. This will include learning about our education strategy, the learning opportunities at Chester Zoo, behaviour change, evaluation, presentations skills, designing education programmes, leadership training and training others. At this talk, the overseas educators will each give you an overview of their projects in the field and how their work with communities is helping to raise awareness and save endangered species.

## MEMBERS' TALKS

All of our Members' Talks are held in the Lecture Theatre, near the zoo's main entrance off the A41, and they start at 7.30pm.

- Our talks are often fully booked so booking is essential
- They're free to members  
(please bring your membership card and welcome letter)
- We offer a special rate of £2 to adopters
- Members of the public and guests are welcome  
(£3.50 for non-members)
- Post-talk refreshments give you the opportunity to have an informal chat with speakers, zoo staff and fellow members

## Interested in attending?

Please call **Kate Brankin** in the Discovery and Learning team on **01244 389831** or email [k.brankin@chesterzoo.org](mailto:k.brankin@chesterzoo.org).



Tuesday 13 November

## BIPS AND BIB-LIOGRAPHIES: POST-RELEASE MONITORING OF TRANSLOCATED PINE MARTENS

Since 2015, the Vincent Wildlife Trust has been carrying out conservation translocations of European pine marten from Scotland to Wales. Considerable time, money and effort go into planning and conducting translocations, along with ethical and wellbeing considerations for the released animals themselves. Since autumn 2015, a total of 51 pine martens have been translocated. Following release, all of the animals have been tracked until they have established home ranges, after which they are located daily and then weekly. Then there is a further period of intensive radio-tracking to locate denning sites of breeding females. Hair tubes and camera traps are also used to monitor breeding success. Identification of individuals on camera has been made possible by a detailed catalogue of bib photos, called our 'bib-liography'! Join Dr Jenny MacPherson and David Bavin from the Vincent Wildlife Trust as they share what we've discovered from the translocation as a result of these combined techniques.

**Bank of America  
Merrill Lynch**



# Volunteers you can bank on!

We are delighted to announce that Bank of America Merrill Lynch (BofAML) is continuing to support Chester Zoo's conservation and education activities through lending several hundred pairs of hands to help us get the Wild Worlds festival ready!

In the chilly depths of winter, volunteers from BofAML worked on some of our existing garden spaces; digging, raking, planting and generally sprucing them up ready to become part of the Wild Worlds offer. Other groups of eager helpers worked alongside our UK field conservation team to complete the final tasks needed before opening the second phase of the Chester Zoo Nature Reserve. This time, in the balmy sun of early spring, volunteers built 'dead hedges' from willow and fencing for around the ponds, and dug holes for water voles and mining bees to create nests.

We were thrilled that some of those who volunteered were able to join us at the official opening of the Nature Reserve in



April, and see their handiwork blossoming! Laura Dunn from BofAML's Chester site has been rallying colleagues to get involved in volunteering:

"The staff at Chester Zoo were extremely welcoming and volunteers from the bank thoroughly enjoyed getting out into the community to help out."

Keep an eye out for more BofAML volunteers throughout the Wild Worlds festival, where they will be supporting some of the performers and our Guest Experience team. They will also be back on site throughout the summer to help us prepare the winter food for our grazing mammals. Amazing!

*Corporate volunteering is a great opportunity offered to our sponsors and corporate champions. If you'd like to find out more about corporate packages email: [fundraising@chesterzoo.org](mailto:fundraising@chesterzoo.org).*

# Look at what we've got in store for you!

Discover the latest treats we've got in store for you this summer...

## EMMA BRIDGEWATER MUGS

Some of the bold, beautiful and unmistakable designs from the British ceramics manufacturer, Emma Bridgewater, will soon be available at the zoo.

The company was founded by Emma herself, who remains the driving force behind the iconic cream earthenware motifs, while husband Matthew Rice indulges his passion for birdlife in his designs for the Bridgewater ranges. The majority of the work is done by hand and, for the personal touch, each piece is signed by the person who decorated it.

We have chosen 10 different mug designs, including some of the Bridgewater classics and a range of sponge printed animal designs: Cheeky Monkey, Brave Lion and Mama Bear. Each one is a perfect addition to your table!

## PLAYMOBIL

We have a fantastic range of Playmobil lines, everything from the Large City Zoo to additional packs of animals to add to your collection. What a great way for some family-friendly fun; re-enacting your fabulous day out at Chester Zoo with some of your favourite animals and creating your own zoo without bars!

We have recently expanded the range to include keyrings at £3.99 and a Beekeeper with honey kit at £6.99.



## WILD WORLDS CHESTER ZOO

As part of **Wild Worlds at Chester Zoo** you can hear more about our scientific work with black rhinos on one of our over-sized, beautifully designed installations: The Thornbush Chair. Sit back, relax and listen as it tells you more about the species as you observe them in their zoo habitat (take a look at page 13 to find out more).

# Communicating through smell

**We're proud to be helping to train the next generation of conservation scientists. We do this through collaboration with a number of academic institutions to support research students at MSc and PhD level – our Chester Zoo Conservation Scholars.**

Our scholars work in a number of different areas, providing evidence on a range of topics, both at the zoo and in the field. We caught up with one of our Conservation Scholars, Becky Titchard, to talk about her research into the critically endangered Eastern black rhino, the interesting way they use scent to communicate and the important role it plays in the rhinos' lives.

Rhinos in the wild are facing severe threats, so understanding their social and breeding behaviours is becoming increasingly important in order to save this species from extinction. The species has relatively poor eyesight and is mainly solitary so it's likely that scent plays a big part in the interaction between individuals. Becky has spent her time with Chester Zoo studying our eight eastern black rhinos and recording their scent marking behaviours to learn more about this iconic species.

Scent communication is an important factor in the social lives of many species, and often plays an important role in breeding success. Becky watched 480 hours of video footage of our rhinos, using our CCTV cameras to get an idea of how they use scent to communicate. She found that urine spraying was a very important part of communication between the rhinos; when they moved habitat or another individual was introduced, the urine spraying increased.


### Becky says:

"There is actually not that much scientific evidence on rhino communication but we know that they use it a lot. There are lots of anecdotal evidences that suggest it is really important for rhinos' social interactions but we don't have the scientific data to understand properly what role it actually plays.


"If you are a zoo looking at mixing male and female rhinos, then giving them access to each other's scent to allow them to get that bit of information about each other before they actually meet is really important! That way once they are introduced in the same habitat they are not strangers and already know about each other."

Becky's results suggest that urine spraying is not only a way of the rhinos marking their territory, but is also a 'scent cue' used to inform other rhinos who else is in the area. She found that these scent cues were likely to increase when the rhinos were sexually active in order to attract a mate.

Discover more about how we **ACT FOR WILDLIFE** at [ACTFORWILDLIFE.ORG.UK](http://ACTFORWILDLIFE.ORG.UK)

 @ActforWildlife

 facebook.com/ActforWildlife

 @ActforWildlife



# Protecting mega-herbivores

We have an exciting and important new partnership with the University of Manchester, which will help us protect some of the world's most endangered animals.

Backed by more than £1.1m of investment, our combined expertise will deliver major scientific research into populations of some of the most endangered mega-herbivores. They include the highly threatened Eastern black rhino and Grevy's zebra in Kenya and South Africa's Cape mountain zebra.

More than 60% of mega-herbivores are facing extinction because of reductions in their historical range and the degradation and fragmentation of their habitat, as well as livestock competition and persecution. The initial focus of our research will be in African savannahs, where the highest diversity of mega-herbivores is found. Investigating how health and population growth varies across wild populations of rhino and zebra will reveal how they are affected by environmental change and human disturbance. These findings will guide where conservation actions will be most effective in preventing extinction.

The second focus for our research will explore new ways to effectively manage small animal populations outside their natural range, including within zoos, to maximise their conservation potential. This will ensure 'safety net' populations are fit for reintroduction and promote world class animal reproduction and welfare in zoo breeding programmes.

The partnership will also train conservationists of the future, by drawing on the university's research capabilities and on the zoo's expertise in wildlife conservation physiology.

The new agreement will look to build on these initial projects to establish similar ones across the world.

**Dr Sue Walker, Head of Applied Science at Chester Zoo, said:** "The recent loss of Sudan, the northern white rhino, has highlighted the challenges of species conservation. Using science to unravel how species, both within and outside their natural range are interacting with their environment, will enable species managers to be more effective with resources and more strategic in species conservation planning. Our partnership with the University of Manchester brings together skills sets from both institutions and is a crucial step towards protecting some of the most charismatic species on our planet."

**Professor Susanne Shultz, a Royal Society University Research Fellow from The University of Manchester, said:**

"This partnership represents the best of collaborative applied science. The university is combining its expertise, facilities and technology with the conservation experience and global conservation reach of the zoo to find innovative solutions to the global biodiversity crisis."

# Surprise new arrival

Our rare Asian elephant calf caused quite a stir when he was born this May – nearly three months after the predicted due date!

Expectant mum Thi, the wonderful matriarch to our Hi Way family herd, has successfully given birth to six calves previously, but this time circumstances were quite astonishing.

Keepers and scientists believed she had exceeded her normal gestation period, which was being closely monitored. Hormone tracking showed that the 35-year-old was due to give birth three-months prior and she slowly began returning to her normal weight. Every indication was that she may have been resorbing the calf – a natural process that some elephants experience.

Despite the unusual circumstances – and after an assumed gestation of 766 days - keepers arrived at the elephant house on 17 May to discover, to their great surprise and delight, that Thi had given birth overnight to a healthy male calf.

They are both doing very well and the calf took his first outing just hours later, with his attentive family all around him.

He has been named Anjan by keepers, after Anjan Baruah, a project worker who has played an important role with our partners on a major initiative in northern India. The Assam Haathi project has successfully eliminated conflict between local communities and the nearby Asian elephant population, offering a blueprint for the future conservation of the species.

## JOIN THE HERD...

Don't forget – our Summer Stampede is taking place on Sunday 12 August to raise money for our Never Forget campaign which will help us in our mission to find a solution to EEHV. Discover more about the event and book your place at: [chesterzoo.org/stampede](http://chesterzoo.org/stampede)



**Chester Zoo**  
**Upton-by-Chester**  
**Chester CH2 1LH**

**Tel: 01244 380280**  
**Fax: 01244 371273**  
**Email: [info@chesterzoo.org](mailto:info@chesterzoo.org)**  
**[www.chesterzoo.org](http://www.chesterzoo.org)**

