QUARTERLY PUBLICATION OF THE EUROPEAN ASSOCIATION OF ZOOS AND AQUARIA

ZOOQUARIA

SUMMER 2026

ISSUE 130

GIANT STEPS

THE SURPRISING DISCOVERY THAT IS TRANSFORMING GIRAFFE CONSERVATION

WELCOME TO ZOOTOWN

INSIDE ZSL LONDON ZOO'S NEW EDUCATIONAL SPACE

SMALL BUT MIGHTY

WHY WE MUST PROTECT THE WORLD'S POLLINATORS

CONTENTS SUMMER 2026

EAZA CORPORATE MEMBERS

AB Aqua Medic GmbH
ABC Rides
Accesso
Africa Style
Animals Concept
Aqua-Sander
Arie Blok Animal Nutrition/Kasper Faunafood
ArtSystemDeco
Attractions.io
Billings Productions, Inc
Bio/Zoo Information
Brogaarden ApS
Bureau d'étude AKONGO
Bureau d'études Bioparc
Bushman
Carl Stahl ARC Design&Build
China Light Festival
Convious
Crossborder Animal Services BV
DigiTickets
Dino Don
Dinosauriosmexico
Dorset Identification b.v.
EKIPA
Evasion-Jeux
Fachjan Project Plants
Fahlo
Fox Consulting
Granovit AG
Granum Animal Nutrition
HMJ Design
Immersive Productions
Immotion
Instone Air Services Ltd.
Intipa
Intradco Global
International Product Supplies
Jakob Rope Systems
KaGo & Hammerschmidt GmbH
Kiezebrink International
Komodo Zoo Services
Marine Nutrition
MAT Filtration Technologies
Mazuri Exotic Animal Nutrition
n-gage.io
Ny Vraa
Petjes World
PIXBOX
Ralf Imagen y Comunicacion S.L.
Rasbach Architekten
Ravensden Plc
Rewild Safaris
Reynolds Polymer Technology
Saint Laurent S.A.
Sanero Kunstfelsen
SAS Zoopoli France
Seafoodia
Siane
Triotech
ungestalt
Visit Group
Waterhouse Feeds
Widukind Enrichments
Wild Immersion
Wild Republic
Worldwide Zoo Consultants
Zoological Adviser
Zoologistics
Zooprofis

A QUICK GUIDE TO FREQUENTLY USED ACRONYMS

CITES:	Convention on International Trade in Endangered Species
EEP:	EAZA Ex situ Programme
IUCN SSC:	International Union for Conservation of Nature Species Survival Commission
LTMP:	Long-term Management Plan
RSP:	Regional Species Plan
TAG:	Taxon Advisory Group
ZIMS:	Zoological Information Management System

Zooquaria is the quarterly magazine of the European Association of Zoos and Aquaria (EAZA).

EAZA Executive Office, Plantage Middenlaan 45, 1018 DC Amsterdam, the Netherlands
Email: info@eaza.net ISSN 2210-3392. For information on print subscriptions to Zooquaria visit: https://www.eaza.net/zooquaria
The views expressed in this magazine are not necessarily those of EAZA.
The paper used for printing is FSC quality (sustainable). Organic inks are used.
Plates for printing are free of chemicals. All waste is disposed of in an environmentally friendly manner. Printed by Euro Mail BV.
Cover image: Reticulated giraffe © GCF & Billy Dodson

FROM THE DIRECTOR'S CHAIR

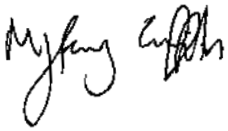
This issue of *Zooquaria* contains both sadness and joy as we acknowledge the dynamism, innovation and commitment of our community. We start by paying tribute to Leobert 'Bert' de Boer, one of EAZA's founding fathers, whose vision and leadership shaped the foundations of our Association and the wider zoo community. I never had the privilege to meet him in person; however, his legacy is well known to me and evident in our ongoing efforts to be progressive in animal welfare, conservation and education.

While researching Bert's legacy, I came across his 'From the Chairman's Desk' piece in *EAZA News* 2004 (the precursor to *Zooquaria* and my own 'From the Director's Chair'). It struck me that EAZA has fulfilled many of the ambitions he shared for it: to be a strong association that has external influence, can lobby with EU authorities and can be a partner for fellow conservation bodies. Several articles in this issue – on the Brussels Advocacy Days (page 25), links between the EU Pollinators Initiative and pollinator conservation with the Zoo LIFE Pollinators project (page 18), the transformation of Lago Vivo in Valencia into a thriving wetland (page 14) and hands-on seabird conservation in Peru (page 16) – all evidence successful delivery of those ambitions.

At the same time, some of the thoughts in the 'Chairman's Desk' piece are still under discussion. Topics like finding 'the proper balance between the wish for individual freedom and the desire for joint strength', addressing the proverb 'the strength of a chain is determined by its weakest link', and embracing our diversity without letting it divide us still resonate today. Many of these topics were part of the highly successful EAZA Directors' Days, where Members reflected on achievements and charted the course for our next five-year strategy (see page 13).

I believe that finding the balance between individual freedom for Members and the joint strength of the Association that represents them requires constant attention to be successful. Regular gatherings such as our various conferences as well as inclusive processes such as the Long-term Management Plans (mentioned on page 24) and Regional Species Plans to name just two, all supported by an effective Executive Office, help individual voices contribute to our shared purpose and the value of collective action.

EAZA is no one individual person or institution. The joint successes of our Members and the Association are brought about by leaning into our diversity and building on our commonalities. Your dedication to being stronger together ensures that you and EAZA remain at the forefront of conservation, animal welfare and public and political engagement. Thank you for your continued involvement and commitment.



Myfanwy Griffith
Executive Director, EAZA

PAGE 13: Facilitator Lizzie Crudgington starts discussions at the EAZA Directors' Days 2026, which invited members to reflect on recent progress and explore the questions that will shape our future

NOTICEBOARD

STRENGTHENING OUR COLLABORATIONS

Working on partnership is a key part of EAZA's vision. We are delighted to have renewed our Memoranda of Understanding (MoU) with the European Association of Zoo and Wildlife Veterinarians (read the EAZWV Director's interview on page 30) and the AZA Reproductive Management Centre.

In addition, the following new cryopreservation partnership Memoranda were recently approved: Allwetter Zoo (Germany), Wrocław University of Environmental and Life Sciences (Poland) and Singapore Zoological Gardens (Singapore).

EAZA SPRING COUNCIL AND AGM

The EAZA 2026 Directors' Days conference was excellently hosted by Beekse Bergen (the Netherlands) in April (see page 13). The conference included a meeting of EAZA Council and the Annual General Meeting (AGM) of the Association.

COUNCIL DECISIONS

EAZA Council approved the following membership decisions. Welcome to new Members and congratulations to those progressing to Full Membership or granted accreditation!

New Members

- **Temporary Membership**: Hamm Zoo, Germany
- **Corporate Members**: Widukind Enrichments, Germany; Waterhouse Feeds, UK; Bushman, Czechia
- **Candidate for Membership (CfM):** Zoo Leśne Zacisze, Poland
- **Deny Membership**: Krokodýlí Zoo Protivín, Czechia (denied on paper – during application phase)

Existing Members

- **CfM to Full Membership**: Kaunas Zoo, Lithuania
- **Temporary Membership to Full Membership**: Auxois Park, France; Fife Zoo, UK; Kraków Zoo, Poland; Conservation Centre of Córdoba Zoo, Spain; Walsrode Birdpark, Germany ; Crocodiles of the World, UK
- **Extension of Temporary Membership (no change)**: Oasis Wildlife Fuerteventura, Spain; Touroparc Zoo, France; Sofia Zoo, Bulgaria
- **Extension of CfM**: Tblisi Zoo, Georgia
- **Maintain Full Membership & Accreditation**: Cologne Zoo, Germany; Shepreth Wildlife Park, UK; Schmiding Zoo, Austria; Falconara Zoo, Italy; Shaldon Wildlife Trust, UK; Vildriket (Järvzoo), Finland; Yorkshire Wildlife Park, UK; Le Parc de Clères, France; Jászberény Zoo, Hungary; Hawk Conservancy Trust, UK; Zoo Le Pal, France; Calviac Zoo, France; Blair Drummond Safari & Adventure Park, UK
- **Maintain Associate Membership & Accreditation**: Experimental Station of Arid Zones (EEZA), Spain; Mandai Wildlife, Singapore
- **Conditional Membership***: Toruń Zoobotanical Garden, Poland; Terra Natura Benidorm, Spain; ZooParc Overloon, Netherlands; Lycksele Zoo, Sweden; Selwo Aventura, Spain; Santo Inácio Zoo, Portugal
- **Withdrawing Members**: Faruk Yalcin, Turkey
- **Termination of Membership**: Eberswalde Zoo, Germany
- **Terminate/End CfM contract**: Palic Zoo, Serbia

* **Conditional Membership***: This is a new category of Membership, agreed upon by the AGM 2024. Conditional Members are those that are working towards resolving Conditions identified during their most recent EAZA Accreditation Screening. They retain the same rights as Full Members but are not Accredited. For further information, see Chapter 2.2.3 in the EAZA Membership and Accreditation Manual.*

AGM DECISIONS

Updates to two key documents were approved: the **Population Management Manual**, and the **Sanctions in the Case of a Violation of the EAZA Code of Ethics, EAZA Standards or EEP Procedures**. Both involved extensive consultation with different committees and Council to ensure the new versions are robust and reflective of best practice. Members will be provided with further detail on key changes via the AGM minutes and a Member mailing.

The following new Council members were approved:

Country	Institution	Name
Belgium	Antwerp Zoo	Sander Hofman
Czechia	Jihlava Zoo	Jan Vašák
Denmark	Randers Tropical Zoo	Henrik Herold
France	Biotropica	François Huyghe
Lithuania	Kaunas Zoo	Gintaré Stankevičė
Netherlands	Ouwehands Zoo	Robin de Lange
Slovenia	Ljubljana Zoo	Suzana Gajic
Turkey	Eskişehir Zoo	Cenk Korugan

Conservation Education Committee Chair

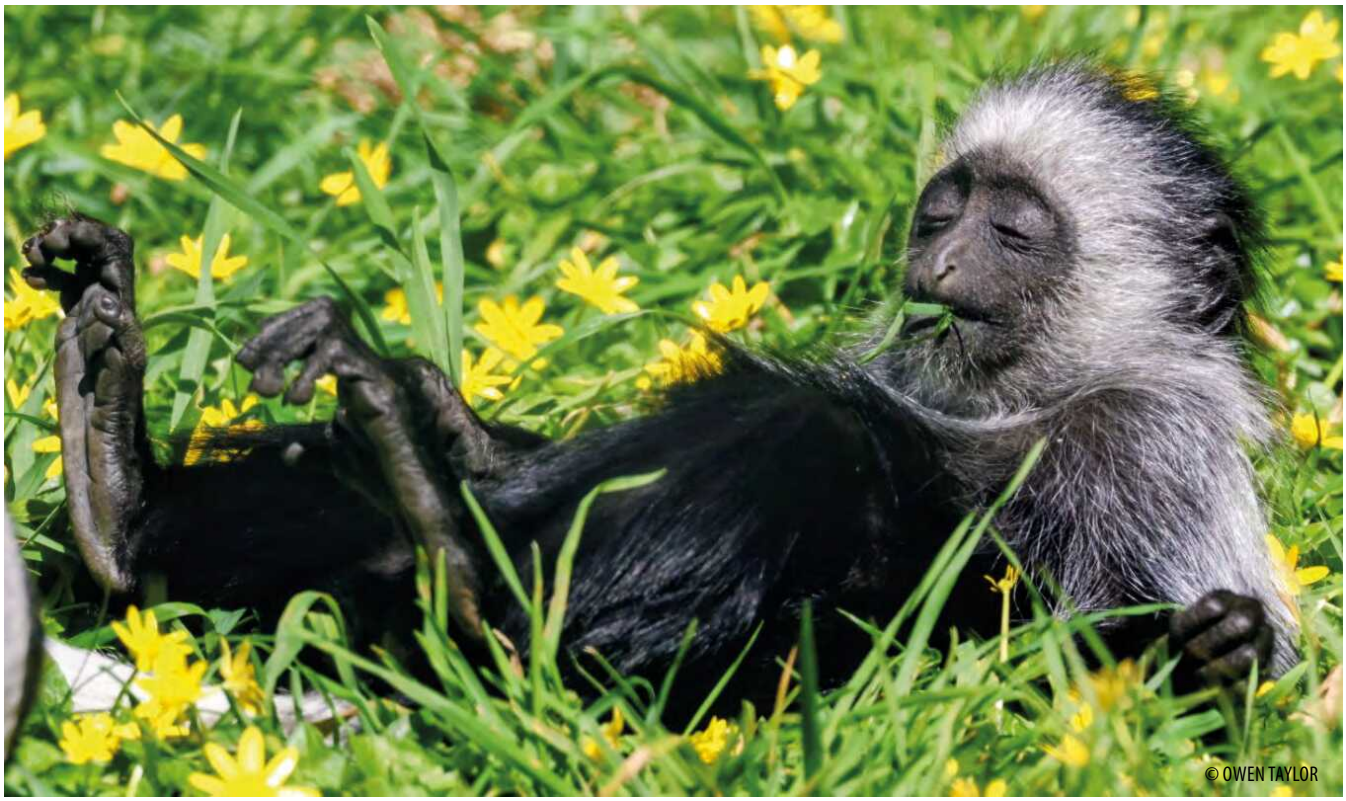
Zagreb Zoo Tomislav Krizmanic

Research Committee Chair

Chester Zoo Kirsten Pullen

All outgoing members were thanked for their service.

BIRTHS & HATCHINGS


© OWEN TAYLOR

LONG LIVE THE KING COLOBUS!

Paignton Zoo (UK) has proudly taken care of Endangered king colobus (*Colobus polykomos*) since 1967. Our resident females, Ivy and Lola, are descendants of the zoo's pair from 1998 and remain important representatives of this rare primate species.

Paignton Zoo has been successful in breeding this species, so it was delighted to receive a recommendation to introduce a new male to the mother–daughter duo. In February 2025, Limbali, a proven breeder from Blackpool Zoo (UK), arrived in Paignton with the aim of strengthening the group and contributing to the species' conservation.

Limbali was kept indoors at first and introduced gradually to ensure a smooth integration. The group soon settled after introductions, and Ivy and Lola accepted Limbali as part of their troop. Mating was observed over time, but it was unclear if successful conceptions had occurred.

The team was happy to see some notable weight increase and that Lola, the younger female, in what would be her third trimester, began having nosebleeds — an indication sometimes associated with pregnancy in this species. Sadly, around this time Limbali's health declined. Following a thorough veterinary assessment, significant health issues were identified, and the decision was made to euthanise on 15 October 2025.

One week later, on 22 October, keepers were overjoyed to discover that Lola had given birth overnight to a healthy infant, later named Limba in honour of her late father. Limba thrived under the attentive care of both her mother and grandmother, gradually transitioning from her infant white coat to the striking black-and-white colouration characteristic of adult king colobus.

Every birth within the *ex situ* king colobus population – currently comprising 58 individuals across 13 EAZA zoos – is a significant conservation achievement. This made it particularly special when, on 1 February 2026, keepers arrived to find that Ivy had also given birth overnight. Both mothers and their young continue to do exceptionally well, and the group remains stable and harmonious.

We are thrilled with the growth of this family and remain committed to supporting the King colobus EEP. Future plans include the introduction of a new male to continue breeding success. The EEP, currently coordinated by Duisburg Zoo (Germany), welcomes interest from potential new holders, so please get in touch if you would like to care for this unique and captivating primate.

GLIMMER OF HOPE FOR THE FATU HIVA MONARCH

The end of 2025 saw the completion of the first year of the EU Life Stop Extinction project, carried out by Société d'Ornithologie de Polynésie (SOP Manu), the BirdLife partner of French Polynesia, in close cooperation with Copenhagen Zoo (Denmark) and other beneficiaries in French Polynesia.

In this first year, *ex situ* protocols for the Critically Endangered Fatu Hiva monarch (*Pomarea whitneyi*) were refined and put to the ultimate test.

The egg from an unsuccessful pair was rescued after previous failed breeding attempts; it hatched in the incubator at less than 5.5 g and represented the first success in hand-rearing a chick from hatch. A second chick was collected soon after the hatch in the wild, to allow another pair to 'double clutch', optimising population recruitment. Thanks to a monumental effort from the staff and volunteers on site at the small rearing and future breeding facility on the remote Fatu Hiva island, both chicks were successfully hand-reared.

The care of these strictly insectivorous flycatchers includes intensive and ongoing management of a diverse array of insect cultures to ensure constant availability of suitable food. They are now part of the tiny *ex situ* population (now numbering three individuals) that is providing glimmers of hope for preventing the extinction of the species.

The birds of French Polynesia are primarily threatened by the presence of alien invasive species. In most cases, invasive predators such as rats and feral cats pose the highest immediate threat to bird populations. But the islands of French Polynesia are additionally affected by invasive plants, invertebrates and livestock, which are detrimental for the delicate island ecosystems.

In Fatu Hiva, invasive bird species have also brought an invasive parasite, avian malaria, to the island, which is now being transmitted to the monarchs by an invasive mosquito species. This case demonstrates the importance of proactively preventing the spread of potentially invasive species into new environments.

With fewer than 20 individuals remaining, the survival of the Fatu Hiva monarch hangs by a thin thread. This ambitious project aims to push the limits of species recovery, develop local incentive and motivation to proactively conserve and restore critical ecosystems on remote French Polynesian islands, and gather valuable knowledge likely to help save other threatened island species before it is too late.

© STELLA JØRGENSEN, COPENHAGEN ZOO, SOP MANU

LEOBERT DE BOER (1947–2026)

ZOOQUARIA PAYS TRIBUTE TO ONE OF EAZA'S FOUNDERS, WHOSE EXPERTISE, VISION AND COMMITMENT HAVE HAD A PROFOUND IMPACT ON THE WORLD OF CONSERVATION

It is with great sadness that we note the passing of Leobert 'Bert' de Boer on 17 March 2026. He was one of EAZA's founding fathers and a visionary across many fields of modern zoological practice. His compelling presence and engaging speeches inspired people to join him in advancing animal welfare, conservation, cooperative population management and non-commercial exchange of animals.

Born on 3 September 1947, Bert studied biology in Utrecht. In 1976, after a period in human genetics, he started working at Rotterdam Zoo as a curator and later became Head of the Biological Department, which was involved in research, education and nature conservation.

BUILDING THE FOUNDATIONS

Bert was also the director of the National Foundation for Research in Zoological Gardens (NFRZG), a small organisation that carried out research in areas where Dutch zoos could improve themselves. The bigger and more general aim was to make zoos more relevant in the conservation of nature and, more specifically, of endangered wildlife. In the early 1990s, the NFRZG morphed into the EAZA Office. Thanks to the foundations laid over many years by several experts from European zoos, including Bert, volunteering their time, innovative thoughts and relentless efforts, a framework was created that would make it possible to manage zoo animal populations jointly across institutions and across borders.

At the beginning of the 1990s Bert also drafted the first edition of the World Zoo Conservation strategy, which was superseded by the World Zoo and Aquarium Conservation Strategy in 2015.

From 1997 to 2009, Bert was the director of Apenheul (the Netherlands), where he developed and implemented a new masterplan, bringing it into the new century as the modern zoo it is while maintaining the strengths of the park as thought out by its founder Wim Mager.

Bert was also Chairman of the Dutch Zoo Federation for many years and Chairman of EAZA from 2003–2009. As if that were not enough, Apenheul accepted the invitation from the municipality of Kerkrade to build a new zoo there. GaiaZoo was Bert's ultimate project, an opportunity to build a zoo where the interconnectedness of everything in nature was explained.

'I found him immensely inspiring – he was always busy with new projects, innovating, improving,' writes Frank Rietkerk, friend and colleague who worked with Bert at the EEP Executive Office and in Apenheul. 'His head was full of ideas, knowledge and plans – on any given day he would sit down and write for hours and there would be a new forward strategy for EAZA, or the basic plan for a new zoo, or Apenheul's budget requirements for the next five years with supporting text. He always wanted people – us – to read those documents and give him constructive feedback. Believe me, we tried, but we could not always keep up.

'Bert was a genius at resolving complex issues in his head and then presenting a solution with all angles covered. Not everyone always agreed, but most people had great respect for the quiet, logical and methodical way he continued to work on his mission – strengthening the role of zoos in nature education and conservation. He always knew exactly where he wanted to go, first with NFRZG, then EAZA, Apenheul and finally GaiaZoo, and was able to communicate this clearly and with conviction.'

Bert was EAZA Chairman and persuaded me to become Vice Chair, though I hadn't thought through the implication that I would become the next Chair! The rest is history. He was the cleverest person I ever worked with, a real visionary in our history. Much of the structure and systems we now have were based on his thoughts and plans. He was almost a caricature, a stern, dour, high-work-ethic Dutchman, who didn't suffer fools very gladly; but he had a mischievous sense of humour and was very loyal and supportive to the teams he built around him. We owe him a lot.

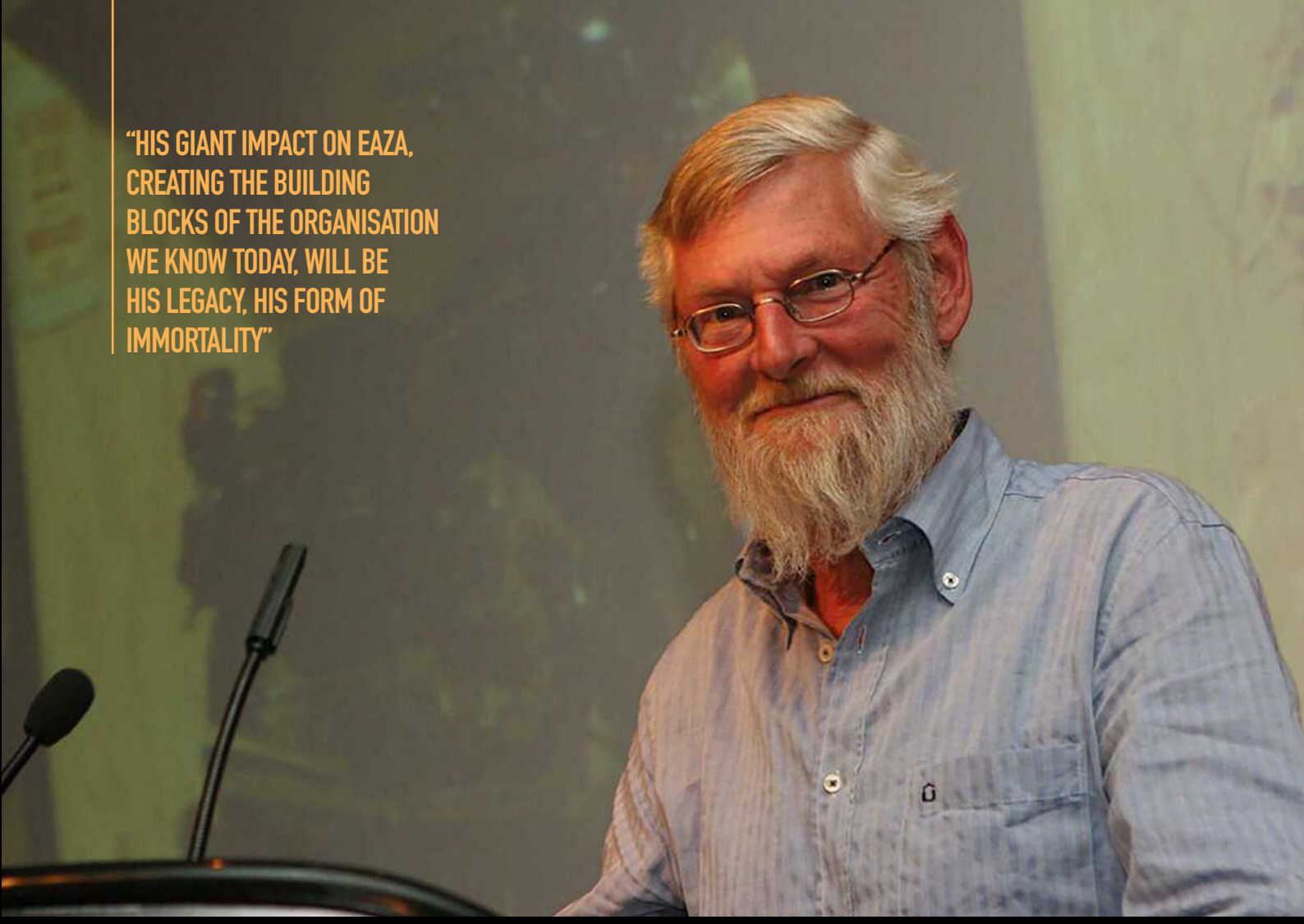
Simon Tonge, EAZA Chair 2009–2016 and former CEO of the Wild Planet Trust

A VITAL LEGACY

The Dutch Council for Animal Welfare (Raad voor Dierenaangelegenheden) recently published an opinion for the government on the zoos of the future. The preparations for this included asking thousands of people in the Netherlands how they felt about zoos and how they saw the future. The great majority answered that they thought zoos were relevant and that conservation and education – as well as animal welfare – were the most important issues: amazing evidence that Bert's mission was accomplished.

EAZA is proud of the many contributions Bert made to our Association and confident that his impressive legacy will continue with present and future generations. Our deepest sympathies go to his wife, relatives, colleagues and friends.

These words were adapted from a tribute written by Frank Rietkerk, Bert's friend and colleague and the former zoological director of Apenheul. To read Frank's full tribute, go to the EAZA news page: www.eaza.net/news/Bert-de-Boer



"HIS GIANT IMPACT ON EAZA, CREATING THE BUILDING BLOCKS OF THE ORGANISATION WE KNOW TODAY, WILL BE HIS LEGACY, HIS FORM OF IMMORTALITY"

Bert de Boer was one of the fathers of modern zoo population management, and of small population management in general. He was a visionary in zoo design and in exploring exciting new husbandry and zoo landscaping concepts, particularly for primates at Apenheul, where he was director between 1997 and 2009, and at his brainchild, GaiaPark in Kerkrade. Bert was also one of the giants of EAZA. He became the first director of the EEP Executive Office in Amsterdam in 1990 (precursor of the EAZA Executive Office, as it is now called), and he was one of my predecessors as EAZA Chair, the sixth Chair of the Association between 2003 and 2009. I will always remember some of his excellent and witty speeches during that time. He will be greatly missed by the EAZA community.

Christoph Schwitzer, EAZA Chair and CEO of Dublin Zoo

Bert de Boer was my first ever Chair when I became a Director and I feel lucky and privileged in having had his wise counsel in that first year of my EAZA tenure – his last year as Chairman. Bert was a perfect blend of intellectual curiosity and tenacity whilst at the same time wanting to make real practical change and progress. Strategic, smart, but pragmatic. He did not blindly defend the concept of zoos; instead he interrogated his own perceptions and biases, a rare skill. What can we improve? How can we be better? Where can EAZA make a more impactful contribution?

He was a gifted orator and his opening speeches at the EAZA Annual Conference were always thought-provoking and, if we are honest, sometimes infuriating for some. However, he didn't provoke needlessly but to advance our thinking, to make us all question more deeply. His quiet sense of humour also shone through as I got to know him, but still there were surprises. When first appointed to work in Amsterdam, I had travelled to Apenheul for a meeting with Bert. I mentioned I would try and learn Dutch. He looked at me gnomically, a quizzical tilt of the head, and said 'Why, we all speak English, you will be far too busy to do that.' At that moment I knew I would be working with a most practical man! I also well remember attending his retirement party and being mesmerised to see that a beautiful motorbike was his leaving gift, having never known he was a 'biker'.

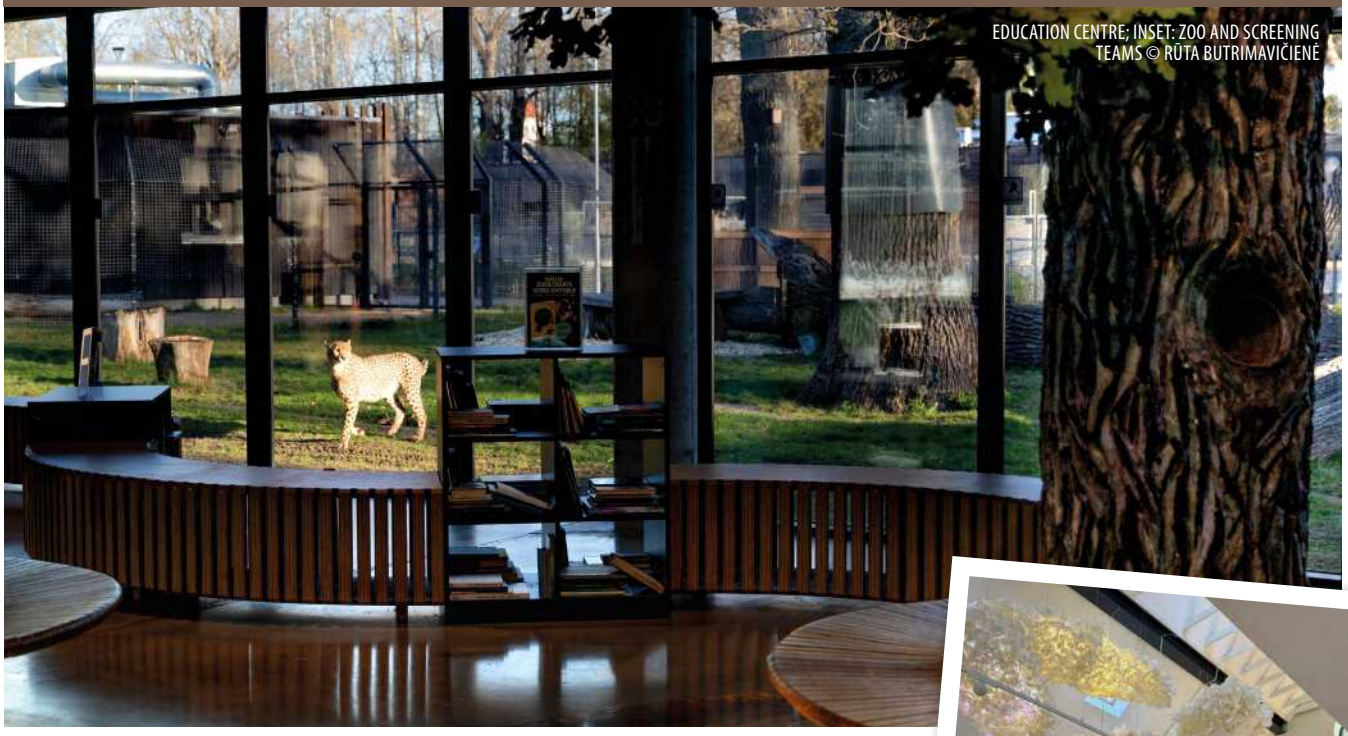
His giant impact on EAZA, creating the building blocks of the organisation we know today, will be his legacy, his form of immortality. Go well, Bert, you made me and many others better, more strategic thinkers, and I thank you for the support you gave so generously to so many of us.

Lesley Dickie,
Executive Vice President, BirdLife International

FROM CANDIDATE TO CATALYST

HOW KAUNAS ZOO BECAME THE FIRST ZOO IN LITHUANIA TO GAIN EAZA ACCREDITATION

Borja Reh, Accreditation Coordinator, EAZA Executive Office; Gintarė Stankevičė, Director, Lithuanian Zoological Garden (Kaunas Zoo); and Tom de Jongh, member of the EAZA Technical Assistance Committee and Kaunas Zoo's mentor, formerly Burgers' Zoo



EDUCATION CENTRE; INSET: ZOO AND SCREENING TEAMS © RŪTA BUTRIMAVIČIENĖ

Crossing the threshold between zoo and conservation organisation is transformative. It marks the shift from being perceived as a place of leisure to being recognised as a credible force for biodiversity conservation, education and animal welfare. Within the EAZA community, accreditation represents that transition.

After years of hard work following the advice and guidance of their mentor Tom de Jongh (formerly Burgers' Zoo, the Netherlands) within the EAZA Candidate for Membership programme, April 2026 carries particular significance for Kaunas Zoo (Lithuania). The zoo is now the first and only EAZA Accredited Member in Lithuania, positioning it as a national reference point for modern zoological practice and conservation leadership.

BEYOND ACCREDITATION: WHY THIS MILESTONE MATTERS

EAZA accreditation is far more than a symbolic achievement. It is a rigorous and evidence-based process that evaluates all aspects of an institution's operations, including animal welfare, conservation, education and governance. It signals to the public, scientific community and decision-makers that an institution operates at the highest international standards.

EAZA Members reinforced the value placed on accreditation in 2024 when they celebrated the completion of the first cycle and approved evolution of the second one. This included updating membership categories based on supporting Members and having confidence that they are meeting the required EAZA Standards as well as moving to a five-year cycle to reflect the increasing pace of change that progressive zoos and aquariums wish to meet. The new cycle also meets and exceeds other industry benchmarks such as the WAZA Animal Welfare Goal.

For Kaunas Zoo, the recognition of being accredited by EAZA is also a moment of national pride. As a publicly run institution, its transformation reflects not only internal commitment but also public investment in conservation, education and ethical animal care. Achieving EAZA accreditation demonstrates how publicly supported zoos can lead at a European level, reinforcing trust and strengthening their social role.

REBUILDING WITH PURPOSE

The zoo's transformation has been shaped by a clear vision, supported by a major reconstruction that redefined both infrastructure and identity. Input from their EAZA mentor and EAZA resources such as Best Practice Guidelines supported this vision. Habitats were redesigned around species-specific needs, ensuring higher welfare standards and more naturalistic environments. Visitor experiences were reconsidered to prioritise education and engagement, while accessibility was embedded as a core value, with inclusive design and sensory-friendly spaces.

This evolution reflects a broader shift within the sector. Zoos today

For Director **Gintarė Stankevičė**, the transformation of Kaunas Zoo was guided by a clear principle: redefining the role of the institution within society.

'When I took on the responsibility of leading the Lithuanian Zoological Garden [Kaunas Zoo], I was convinced that real change could not be limited to just renovating spaces or modernising infrastructure. We had to rethink our purpose: what kind of institution we wanted to be, what values we represented and what responsibility we assumed for animals, nature, society.

'For me, a modern zoo is a place that must inspire respect for life, make a meaningful contribution to species conservation and lead by example in animal welfare, education and professional standards. This understanding guided every decision we made: from improving animal habitats and creating open, accessible educational spaces to participating in species conservation programmes and advancing scientific work. Today, we are a modern zoological centre where people can gain a deeper understanding of nature and build a stronger connection with it.

'Regaining Full EAZA membership is an important recognition of how far we have come, but, more importantly, it confirms the direction we have chosen. As Lithuania's only state-run zoo and the country's only EAZA-accredited Member, we understand that our role is larger than our institution itself. We have a responsibility to be a strong, trustworthy and forward-looking voice for zoology and conservation in Lithuania. We must help set standards, build public trust and contribute to the wider European mission of protecting biodiversity for future generations.'

are measured not by what they display but by how they contribute to conservation and society.

CONSERVATION IMPACT ROOTED IN LITHUANIA

The defining strength of Kaunas Zoo lies in its contribution to native species conservation, demonstrating how a national institution can deliver tangible results (a key recommendation in the EAZA Field Conservation Standards).

One of its most significant achievements is the long-term recovery programme for the European pond turtle (*Emys orbicularis*). Through a headstart initiative, eggs are collected from vulnerable locations and hatchlings are raised under controlled conditions before being released into protected areas such as Meteliai Regional Park and Veisiejai Regional Park. This programme is playing a key role in reversing population decline.

The zoo has also contributed to strengthening populations of the European bison (*Bison bonasus*). As part of a coordinated national effort, dozens of individuals were relocated to Dzūkija National Park, supporting the establishment of stable and genetically viable herds in the wild.

In parallel, Kaunas Zoo participates in several EEPs, including those for the Eurasian eagle-owl (*Bubo bubo*) and lynx (*Lynx lynx*), connecting its local work to broader European conservation strategies.

Together, these efforts reflect an institution where conservation is not an add-on but a defining principle embedded in its DNA.

A COLLECTIVE EFFORT BEHIND THE SCENES

The transformation of Kaunas Zoo reflects the dedication of its entire team and how all departments have embraced new approaches to animal care, training and visitor engagement. Behavioural training programmes now support voluntary veterinary procedures, improving welfare outcomes and reflecting a modern, trust-based approach to animal management. At the same time, strong engagement with international partners has positioned the institution as an active member of the global zoo community.

BUILDING A PLATFORM FOR THE FUTURE

Becoming the only EAZA-accredited Member in Lithuania places Kaunas Zoo in a unique and influential position. They now step forward with responsibility – serving as a national example of what a modern, publicly supported zoo can achieve – and ambition.

This milestone also creates new opportunities for visibility and engagement. By sharing its story through EAZA platforms and communication tools, the zoo can strengthen public understanding of its role and inspire further development across the region. For Kaunas Zoo, accreditation is not a conclusion. It is a new starting point. 'We are proud of this achievement, but we see it as the beginning of a new chapter. Being part of EAZA means contributing, learning and continuing to evolve,' says Gintarė Stankevičė.

From Candidate for Membership to catalyst, Kaunas Zoo moves ahead with purpose and pride, ready to help shape the future of conservation within EAZA and beyond.

Tom de Jongh reflects on Kaunas Zoo's journey illustrating the value of mentorship and collaboration.

'A transformation cannot only be valued by the result of that process. When I first visited the zoo as a mentor, it required vision and imagination to see the full potential of what the institution could become. At that stage, many areas still required significant development to meet EAZA Standards. At the same time, the zoo was already undertaking meaningful conservation work for native species, although this was not yet fully integrated into its public identity.

'Over time, the institution embraced a broader understanding of what EAZA accreditation represents. It is not simply about meeting technical requirements for membership, but about recognising the wider role zoos can play in conservation, education, animal welfare and public engagement.

A decisive moment in this transformation was the appointment of Gintarė Stankevičė as Director, combined with the strong support of the Ministry of Agriculture of the Republic of Lithuania as owner of the zoo. This created a clear vision and motivated the entire team to move forward together.

From that point onwards, the transformation accelerated rapidly. My role as mentor was mainly to support the process by sharing experience, helping navigate the EAZA community and contributing advice on zoo design and technical development. Once the institution fully committed itself to continuous improvement, accreditation became the natural outcome of a much larger transformation.'

GROUP PHOTO © ANTWERP ZOO, JONAS VERHULST; ALL OTHER IMAGES © EAZA

FROM AMBITION TO ACTION

AT THE 3RD BIENNIAL EAZA ANIMAL WELFARE FORUM, THE OVERRIDING FOCUS WAS ON CONVERTING RESEARCH AND THEORY INTO MEANINGFUL ACTION

Holly Farmer, Chair of the EAZA Animal Welfare Working Group, Paignton Zoo; Catarina Santiago, EU Policy Coordinator, and David Aparici Plaza, Animal Programme and Conservation Coordinator, both EAZA Executive Office

From 16–19 March 2026, around 200 zoo and aquarium professionals from 34 countries gathered in Antwerp (Belgium) for the third edition of the biennial EAZA Animal Welfare Forum. The event brought together representatives from zoos, aquariums, welfare organisations and academic institutions for four days of workshops, presentations and discussions focused on evidence-based approaches to animal welfare, bridging the gap between research and practical implementation.

The programme combined keynote lectures, themed sessions, hands-on workshops, poster presentations and zoo visits, offering delegates a mix of strategic reflection and practical learning. A strong theme from the start was the importance of moving beyond welfare theory and standards to actionable implementation. Early sessions explored Qualitative Behaviour Assessment, operational welfare strategies, standardised assessment protocols and EAZA welfare requirements, underlining the need for structured evaluation, staff inclusion, multidisciplinary collaboration, management support and ongoing training.

Workshops gave participants opportunities to develop practical skills in cognitive and affective assessments, enrichment design, digital welfare monitoring and applying welfare frameworks across species. Case studies highlighted real-world challenges, including abnormal ingestive behaviours, nutrition, AI-assisted monitoring, fish welfare, vulture husbandry, reptile responses to environmental stimuli, and the importance of sunlight, microclimate and enclosure choice. Together, these sessions demonstrated that welfare progress relies on careful observation, evidence-based adaptation and flexibility in management practices.

The forum also emphasised the evolving science of cognition and individual differences. Talks on cognitive bias in orang-utans and gorillas and on personality in zoo animals illustrated how understanding animals' perceptions and experiences can inform welfare assessment and practical decision-making. Strategic sessions explored complex trade-offs, such as balancing welfare with reproduction and population management, showing how daily care connects to broader institutional priorities.

Beyond the formal programme, the forum fostered community and professional connections. Delegates enjoyed an icebreaker, visits to Antwerp and Planckendael Zoos, a lively poster session and a farewell dinner. These moments provided time for informal exchange, reflection and collaboration, reinforcing the sense of shared purpose at the heart of the EAZA welfare community.

Overall, the 2026 Animal Welfare Forum demonstrated the value of combining scientific knowledge, practical experience and peer exchange. Participants left inspired, equipped with new tools and perspectives, and reminded that advancing animal welfare depends not only on ambition but also on the systems, skills and collaboration required to turn that ambition into meaningful action.

Big thanks to Antwerp Zoo for hosting this year's forum, and to everyone who helped make it a success. We look forward to seeing you at the 2028 edition!

EXPLORING THE PATH AHEAD

Tomasz Rusek, Director of Advocacy and Communication, EAZA Executive Office

EAZA DIRECTORS' DAYS 2026 INVITED MEMBERS TO REFLECT ON RECENT PROGRESS AND EXPLORE THE QUESTIONS THAT WILL SHAPE OUR FUTURE

EAZA Directors' Days 2026, hosted from 13–17 April by Beekse Bergen (the Netherlands), gathered 180 participants from 33 countries for a reflection on EAZA's future priorities. Building on previous editions – which broadly scanned the horizon for long-term and emerging themes – directors were invited to explore specific questions that EAZA must answer for its next five-year strategy.

PROGRESS REVIEW

Participants began by reviewing the community's achievements in the 2021–2025 strategic period. They agreed that EAZA has become stronger and more confident in its collective purpose. Many noted improved accreditation and progress in animal population management through EAZA Ex situ Programmes (EEPs) and Regional Species Plans. EAZA was described as more cohesive, better at addressing complex issues, having a stronger presence in European policy and global forums such as CITES and IUCN, and making better use of conservation data and tools.

From there, the focus shifted to the future. Guided by the Chairs and Vice Chairs of EAZA Committees, participants examined the community's responses to a strategic options survey that was sent to all Members prior to the event. Working in groups, they then tested possible future directions and flagged topics not yet captured.

LISTENING TO MEMBERS' EXPECTATIONS

One starting question was what a 'good EAZA Member' should look like in practice. Groups explored how high standards, transparency, animal welfare, conservation work, ethical conduct and active participation should relate to one another, and how accreditation can drive realistic progress across EAZA's diverse membership, which spans 47 countries and many models of zoo and aquarium management. This also led into discussion of how Members can communicate EAZA's value in ways that strengthen public trust while respecting their local realities.

Conservation impact raised a different set of questions. Participants explored how impact should be defined, evidenced and recorded, what conservation outcomes can reasonably be expected from all Members, and how our network can work more collaboratively while allowing for independent initiatives.

For population management, discussions returned to the balance between ambition and capacity. Groups considered how EEPs should relate to direct conservation roles, long-term demographic needs, opportunities to enhance the profile of conservation education, and how Members can make space for EEP species in institutional planning. They also asked how population management strategies can be used more widely and better explained. Animal rescues prompted reflection on when such work is genuinely relevant to conservation and how it might connect to EEPs or species recovery.

Further conversations looked at the science behind EAZA's work: how positive animal welfare can be assessed proportionately, how research can become more collaborative and practical, and how data systems, scientific tools and AI might support better decisions. Finally, advocacy brought the discussion back to EAZA's collective voice: how Members and National Associations can continue to build lobbying capacity and where they need support from EAZA.

FROM DISCUSSION TO ACTION

The outcomes were immediately discussed by EAZA Council and will now feed into EAZA's strategic planning. The Executive Committee will use this feedback to shape strategic goals, to be discussed further with Council and Members before adoption this autumn. These goals will then guide the operational plan and budget for adoption at the 2027 Annual General Meeting. This way, EAZA's next strategic directions will be built directly from the shared membership reflections while remaining true to our Association's long-term vision, mission and values.

The event was sponsored by Corporate Members ABC Rides Switzerland, Accesso, Africa Style, Carl Stahl ARC Design & Build, Dino Don, Immersive Productions, Immotion, Rewild Safaris and Ungestalt.

On behalf of the participants, we also wholeheartedly thank our hosts at Beekse Bergen for their fantastic hospitality and our consultant Lizzie Crudgington for her expert facilitation of the strategic reflection process.

Save the date for the next Directors' Days hosted by Gdańsk Zoo (Poland) from 12–16 April 2027!

BRINGING THE LAKE BACK TO LIFE

LAGO VIVO, A WETLAND REBORN IN THE HEART OF VALENCIA, IS A PERFECT EXAMPLE OF HOW WETLAND CONSERVATION CONNECTS, SUPPORTS AND IMPROVES BOTH THE HUMAN AND THE NATURAL WORLDS

Beatriz Domínguez, Conservation Coordinator, and Alicia Borque, Head of Science Communication, both Fundación Oceanogràfic; Pedro del Baño, Educator, and Emilio Badillo, Communication and Media Specialist, both Oceanogràfic Valencia

The EAZA Wetlands for Life campaign was officially launched on World Wetland Day (2 February 2026), celebrating how these ecosystems are rich in biodiversity, essential for climate resilience and deeply linked to human wellbeing. Unfortunately, they continue to disappear at an alarming rate. Zoos and aquariums are uniquely positioned to help reverse this trend by restoring degraded habitats, amplifying local conservation efforts and reconnecting people with the watery worlds around us.

One powerful illustration of this commitment comes from Oceanogràfic Valencia (Spain) and its transformative Lago Vivo (Living Lake) project. In a city long shaped by the presence of the nearby Albufera Natural Park, one of the Mediterranean's most important coastal wetlands, Lago Vivo represents a bold step towards bringing wetland nature back into urban life.

RECONNECTING A CITY WITH ITS WETLANDS

The Lago Vivo project emerged from this vision. What was once an ornamental body of water has gradually been transformed into a living wetland ecosystem. Today, this space acts as a bridge between the city and its surrounding natural areas, bringing wetland biodiversity closer to the city's inhabitants and turning an unused area into a place full of life, meaning and conservation value.

The transformation was gradual and careful. The lake was divided into interconnected sectors to improve ecological management. Chlorine was removed entirely, allowing natural processes to take over. New filtration systems, biological filters, native vegetation and natural substrates were introduced. Artificial edges were replaced with shallow areas and naturalised shorelines. Step by step, life began to return.

EUROPEAN POND TURTLE © OCEANOGRÀFIC VALENCIA

LIFE FINDS A WAY

Aquatic plants and invertebrates were the first colonisers, followed by amphibians. Soon afterwards, birds began visiting, using the lake as a resting, feeding or breeding site. Today, Lago Vivo hosts a dynamic community of plants, fish, insects and birds. Each spring brings an explosion of activity, with seasonal changes clearly visible to visitors. Some birds are part of the collection, while many others arrive freely from nearby wetlands, especially the Albufera, turning the lake into a genuine ecological stopover within the city.

This transformation has also changed the visitors' experience. The lake is no longer just a passageway – it is a place where people stop, observe and connect with nature.

LAGO VIVO BEFORE AND AFTER ITS TRANSFORMATION © OCEANOGRÀFIC VALENCIA

Visitors spend more time in this area, the flow of people has improved and the lake has become a calm, reflective space where natural rhythms set the pace.

GOING FURTHER: CONSERVATION BEYOND THE LAKE

As Lago Vivo evolved into a stable ecosystem, it opened the door to ambitious conservation and research projects focused on vulnerable freshwater and wetland species from the region. The transformation of our Living Lake has encouraged the appearance of a wide variety of vertebrate and invertebrate species, which visit it throughout the year. The continuity of this transformation, combined with its strategic location next to the old Turia Riverbed and near to the Albufera Natural Park, means that a significant number of animal species continue to appear, particularly birds.

Since 2016, nearly 100 species of bird have been recorded at Living Lake by Pedro del Baño, one of our ornithologists and educators. Some of the birds are resident and remain here all year round, such as Eurasian moorhen (*Gallinula chloropus*), mallard (*Anas platyrhynchos*) and Western cattle-egret (*Ardea ibis*); others are winter birds, such as great cormorant (*Phalacrocorax carbo*), common chiffchaff (*Phylloscopus collybita*) and common kingfisher (*Alcedo atthis*). There are also summer birds, such as barn swallow (*Hirundo rustica*), common house martin (*Delichon urbicum*) and common swift (*Apus apus*), and migratory birds that use the lake as a feeding and resting area during their journeys both in spring and autumn, such as sedge warbler (*Acrocephalus schoenobaenus*), willow warbler (*Phylloscopus trochilus*) and subalpine warbler (*Curruca iberiae*). This transformation highlights the importance of wetlands and ensures that a large number of bird species continue to appear there.

It is important to emphasise that these visitors are native species and there are no records of invasive species, which is crucial for implementing certain conservation projects. Several threatened species are now part of long-term conservation programmes linked to the lake. The Valencian toothcarp (*Valencia hispanica*), endemic to Mediterranean coastal wetlands, has had a stable population in the lake since 2020, enabling reintroductions into natural habitats. The population of Júcar nase (*Parachondrostoma arrigonis*), another freshwater fish, has grown significantly, and reintroductions are planned soon. Both species are currently listed as Vulnerable on the IUCN Red List, but Spanish experts are working to have their statuses reassessed to reflect more accurately the severe decline that they are, sadly, observing on site.

Less visible but equally important are conservation actions for freshwater mussels (such as *Unio mancus*), which depend on complex ecological relationships to survive. Amphibians such as the Iberian ribbed newt (*Pleurodeles waltl*), reptiles such as the European pond turtle (*Emys orbicularis*) and various wetland bird species are also part of breeding, monitoring and population reinforcement programmes.

To showcase species that are harder to observe in the lake, small aquariums and interpretive displays have been added, which help to explain why even the smallest species play a crucial role in wetland health.

All these actions are done with local and regional authorities, research centres and conservation organisations. The work extends beyond Oceanogràfic, including pond restoration, species reintroductions and monitoring programmes across the region.

A LIVING WETLAND FOR ALL

Beyond conservation, Lago Vivo is a powerful educational and social tool. The lake allows visitors to understand wetlands not as distant or abstract places, but as living systems connected to their daily lives. Through guided walks, interpretive routes, workshops and science communication activities, Oceanogràfic acts as a centre of interpretation, highlighting the ecological, cultural and social value of wetlands such as the Albufera.

Educational and leisure activities have been developed to link Lago Vivo directly with the Albufera Natural Park. Visitors are invited to explore connections between the lake and nearby wetlands, understand their importance and feel emotionally engaged with their protection. By combining learning, enjoyment and real-world connections, Lago Vivo turns curiosity into awareness and awareness into action.

Looking ahead, Oceanogràfic aims to continue nurturing these connections. Conservation, reduction of water use and educational efforts will expand, strengthening the bond between the people of Valencia and their wetlands. Through these projects, Lago Vivo will remain not only a home for biodiversity but also a living symbol of how urban spaces can inspire care, respect and stewardship for nature.

Want to find out how they did it?
Go to www.wetlandsforlife.eaza.net/page-22

HANDS-ON HELP FOR SEABIRDS

HOW SOME ON-THE-GROUND CONSERVATION WORK HELPED TO SUPPORT THE SEABIRDS OF PUNTA SAN JUAN AND CLARIFY THE CHALLENGES THEY ARE FACING

Alistair Keen, Head Keeper, Birdland Park and Gardens

Punta San Juan (PSJ) is a 133-acre peninsula in Peru that is one of the most important breeding sites in the country for the 'guano birds' – Guanay cormorant (*Leucocarbo bougainvilliorum*), Peruvian pelican (*Pelecanus thagus*) and Peruvian booby (*Sula variegata*). Managed by the National Service of Protected Natural Areas of Peru, it is also home to Peru's largest colony of Humboldt penguins (*Spheniscus humboldti*).

Its location on the Humboldt Current provides a nutrient-rich system; there is abundant food for all these marine predators, who in turn produce tonnes of guano, a fertiliser that has been harvested for centuries. Since 1909, PSJ has been protected to encourage seabird breeding and maintain the production of guano. However, the area is facing many issues that threaten these vital populations, including El Niño, avian influenza, overfishing, pollution and the effects of guano harvesting.

Birdland Park's (UK) collaboration with Penguins International began in 2023, when Spike, a king penguin (*Aptenodytes patagonicus*) living in our zoo, was crowned winner of their March of the Penguins Madness – an education initiative designed to celebrate penguins, inspire learning and encourage conservation. The following year, we were asked to co-sponsor a Humboldt census across 40 sites in Peru, including PSJ. During the moulting season, only 270 birds were recorded; 1,621 were seen at the same time in 2022. The decrease was attributed to a devastating combination of avian influenza and an El Niño event. In 2025, we were approached to send someone out to Peru to assist the team on site, and that's how I was fortunate enough to spend 15 days in September volunteering for the Punta San Juan Programme (www.puntasanjuan.org).

PRACTICAL CONSERVATION

Guano harvesting occurs once every five years and every effort is made to minimise disturbance; there is no machinery other than trucks, and workers wear beige and are screened from view by bags of guano piled high. The first task was to monitor the effects of the practice on penguins. It involved two volunteers stationed at separate viewpoints looking for any penguin behaviour changes, such as pausing or changing direction, and noting the cause of any such disturbance. This was all logged in a database. One point really stood out during the monitoring: how much more sensitive the wild penguins were compared to their zoo peers. Single birds rarely set off alone, and small groups rarely moved around without any disturbance.

In 2024, there were an estimated 400 birds breeding on site. Another task was to build artificial nests for the reserve to increase nesting sites and breeding success. Many nesting penguins dig scrapes into the guano and, although these are successful, many eggs and chicks are lost to vultures and gulls as well as to long exposure to the sun. In collaboration with Engineers Without Borders, the PSJ Programme team came up with a design for nest boxes that included ventilation to avoid overheating. A wire and wooden frame was built and coated in four layers of cement. We completed 100 nest boxes, which will be installed in the reserve in early 2026, when the birds have dispersed after moulting, and at other breeding sites in Peru.

Other tasks included daily walks along the coast and the 20 beaches to look for tagged sea lions and potential fatalities, observe interactions between the pinnipeds and plastic products, monitor any fishing fleet (fishing is not permitted within a certain distance) and record the occurrence of any 'unusual' bird species.

We were also assigned nest sites, which were photographed every Friday by drone, and we had to report

IN THE 2024 MOULTING SEASON, ONLY 270 HUMBOLDT PENGUINS WERE RECORDED; 1,621 WERE SEEN AT THE SAME TIME IN 2022

in the database the numbers of active nests and if the penguins were present, standing or sitting, as well as whether eggs, chicks or fledglings were visible. These records go back as far as May 2025 and give an insight into where the more successful locations are.

PREDATORS AND OTHER CHALLENGES

I also joined one of PSJ's field biologists on his rounds to inspect some of the inaccessible Humboldt nests (in caves or collapsed cliffs), and to check their predator control measures. We were able to observe many nesting penguins and even some very small chicks. Unfortunately, there was evidence of rats, with multiple footprints found and many predated eggs. Rats are controlled on site using Good Nature traps; some are linked to phones via Bluetooth, while others have cameras on them to record their success, as the vulture population is very quick to clear up.

Presentations given by PSJ Director Susana Cárdenas during my time there reported a decline in penguins, pelicans and other seabird populations. El Niño is a big problem, as it brings warmer water into the ecosystem, leading to the dispersal of the anchovy population, the main prey species for the birds. El Niño is happening more frequently, so it is harder for local populations to recover. This phenomenon, alongside avian influenza, has led to a dramatic decline in seabird populations. The Humboldt population on site has decreased from 5,000 to 400 in a very short time. Fishing is another issue; the fishing industry takes up to 88% of the 'energy' from the local fish stock, compared to 2.2% for the seabirds. The reserve has a protected coastline, but many fishing boats could be seen daily. It was reported that 922 penguins died in fishing nets between 1991 and 1998. Pollution was also evident; we found bottles, food containers, nets and other waste on every beach. There is still a lot to do.

Birdland Park continues to support Punta San Juan from the UK. We have installed a new donation collection point and signage to raise awareness, and we highlight the problems in our two daily penguin talks. We hope there'll be another opportunity in the future to put feet on the ground to help the PSJ Programme.

ALISTAIR WITH THE PENGUINS' NEW NEST BOXES © BIRDLAND PARK

WHAT ABOUT HUMBOLDT PENGUINS IN EAZA ZOOS AND AQUARIUMS?

The Humboldt penguin is managed as an EEP, currently coordinated by Patrik Pastorek (Košice Zoo, Slovakia). The *ex situ* population increased until 2015 and has since remained stable. Numbering around 2,500 individuals, it's the world's largest penguin population managed in human care.

Listed as Vulnerable with a decreasing trend in the IUCN Red List, the EEP population is managed as an insurance population. Penguins are also important flagships for healthy ocean ecosystems. The EEP has an educational role in increasing public awareness of the threats penguins face and of penguin conservation. New education guidelines for penguins are under development. The goals of the EEP include:

- **maintain the current population size,** with EEP participants caring for sufficiently large colonies in appropriate habitats. Large colonies tend to be favourable to the welfare of the species with more natural dynamics, higher breeding success and less stress perceived
- **investigate health issues** related to high chick mortality and improve husbandry to decrease adult mortality caused by infectious diseases
- **develop a group management scheme** to prevent inbreeding within institutions and preserve the genetic diversity in the population
- **avoid hybridisation** with other penguin species, especially with other Spheniscus species, to ensure the taxonomic integrity of the EEP population

In addition to the PSJ Program, the EAZA Penguin TAG encourages support for Sphenisco, an NGO working with Chilean conservationists and scientists to help save the Humboldt penguin from extinction. Many EAZA Members are involved with this organisation. Two members of the TAG have also recently joined the IUCN Penguin Specialist Group to bridge the gap between *in situ* and *ex situ* efforts for all species of penguin.

PROTECT THE POLLINATORS

THE URGENT TASK OF PROTECTING EUROPE'S POLLINATORS IS THE FOCUS OF A NEW GLOBAL CONSERVATION PROJECT – ARE YOU ON BOARD?

BROWN HAIRSTREAK (*THECLA BETULAE*) © SIGNE ELLEGAARD

Signe Ellegaard, Zoologist, Copenhagen Zoo

A hoverfly may not draw the same attention as an elephant, yet it deserves the same commitment from zoos. In June 2025, a new four-year transnational project on engaging zoos, visitors and local communities in European pollinator conservation was started. The name of the project – Zoo LIFE Pollinators – says it all: a pollinator-focused project, run by zoos and funded under the EU LIFE Programme.

WHY POLLINATORS?

Pollinators are in decline. According to the latest IUCN Red list assessments of the species groups, 10% per cent of wild bee species, 37% of hoverfly species and 14% of butterfly species in Europe are threatened. Major threats to these groups include habitat loss and degradation, usually caused by agricultural intensification, wetland drainage and livestock overgrazing, but also due to urbanisation where green spaces are often sparse, usually fragmented and with low ecological potential.

WHY ZOOS?

Pollinators – aside from some exotic butterflies – are not traditionally at the centre of zoo conservation programmes, partly because they are less visible and harder to exhibit. Their seasonal life cycles also pose challenges. However, zoos hold untapped potential: expertise in invertebrate husbandry, conservation breeding, habitat restoration and environmental education.

With approximately 5.5 million annual visitors across partner institutions, zoos have a unique outreach capacity. Furthermore, urban and peri-urban zoos may act as green corridors in jungles of concrete – if managed in the right way.

WHO'S INVOLVED AND WHAT'S THE PLAN?

16 institutions* have joined forces, including nine EAZA zoos, alongside universities, NGOs and research organisations.

The project aims to address European pollinator declines by enhancing the role of zoological institutions in their conservation through habitat management, visitor engagement and community-based actions. Guided by Nordens Ark (Sweden), each zoo will restore and manage dedicated areas of the zoo in a pollinator-friendly manner. These areas will be monitored before and after the restoration. Data on butterflies will be collected as a part of the European Butterfly Monitoring Scheme, making information available for one of the biggest citizen science networks in Europe.

Copenhagen Zoo (Denmark) will be in charge of making pollinator conservation breeding more accessible for all zoos by creating the first ever EAZA Best Practice Guidelines on one butterfly, one hoverfly and one wild bee species in close collaboration with Nordens Ark, the Royal Zoological Society of Scotland (UK) and the University of Turin (Italy). Building capacity to breed European pollinators and developing these guidelines align perfectly with the results of the latest Regional Species Plan workshop in the Terrestrial Invertebrate TAG. The TAG focus was solely on European species, and the establishment of a European Pollinator Task Force was proposed as well as a multispecies EEP for European hoverflies. The Zoo LIFE Pollinator project aims to create a network under EAZA and the European Species Initiative (led by Zagreb Zoo, Croatia) to share experience, knowledge and engagement with European pollinators.

Zagreb Zoo will lead educational activities that increase the awareness and knowledge of children as well as encouraging visitors to participate in project actions through citizen science. A large communication strategy has been developed and put into action to ensure that digital and physical platforms alike reach a wide range of audiences. Stakeholders,

including neighbouring institutions, municipalities, NGOs and other zoos, will be invited to take part in the project by applying the stakeholder guidelines developed during the project.

The project's protocols, toolkits and educational materials will be available to inspire the wider zoo community, support pollinator-friendly habitats and strengthen public engagement. In the coming months, more zoos will be able to join through a dedicated call for interest, supported by a roadmap. Stay tuned!

*** The Zoo LIFE Pollinators consortium includes:**

- **EAZA Members**: ZOOM Torino (coordinator), Italy; Nordens Ark and Gothenburg Zoo, Sweden; Copenhagen Zoo, Denmark; Zagreb Zoo, Croatia; Brașov Zoo, Romania; Debrecen Zoo, Hungary; Oasis Wildlife Fuerteventura, Spain; and the Royal Zoological Society of Scotland (RZSS) as an associated partner
- **Other organisations:** Fondazione ZOOM, SMART Revolution SRL, University of Turin, all Italy; and University of Zagreb Faculty of Agriculture, Croatia
- **Associated partners:** Butterfly Conservation Europe, the Netherlands; Associazione Lepidotterological Italiana, Italy; and Chekipa Foundation, Spain

THE COMMON GLANVILLE FRITILLARY BUTTERFLY (*MELITAEA CINXIA*) © JESPER SANDSJÖ, NORDENS ARK

A NEW DEAL FOR POLLINATORS by Alice Albertini, EU Policy Coordinator, EAZA Executive Office

The global decline of wild pollinators and its negative impact on food security, human health, quality of life and ecosystem functioning has become a growing concern for society. Over the past decade, the EU has progressively shaped a policy and legislative framework to safeguard pollinators, marked by milestones that shift from narrowly targeted measures towards a more integrated approach. In fact, EU policy today recognises that pollinator conservation intersects with sustainable agricultural practices and pesticide regulation, ecosystem restoration, urban planning and green infrastructure, and broader biodiversity goals. This reflects a growing understanding that effective conservation requires coordinated action across all sectors that pollinators and people depend on.

Of course, the existence of EU policies *per se* does not guarantee effective implementation by Member States, and non-binding initiatives depend heavily on national uptake. Moreover, environmental organisations warn that the current political push for administrative 'simplification' risks weakening progress achieved under the EU Green Deal, potentially undermining the EU's capacity to reverse pollinator declines.

THE LEGISLATIVE CONTEXT

The **EU Pollinators Initiative**, adopted in 2018 by the European Commission, was the first-ever EU framework designed to address the decline of wild pollinators, laying the groundwork for coordinated action and improving monitoring. It has been acknowledged in the **EU Biodiversity Strategy** (released in 2020, one year after the adoption of the EU Green Deal), the ambitious long-term plan to put Europe's biodiversity on a path to recovery by 2030. Other major parallel initiatives, such as the EU Farm to Fork Strategy, the Zero Pollution Action Plan, the Forest Strategy and the Strategy on Adaptation to Climate Change, contribute to reduce pressures on pollinators and enhance their habitats. Globally, the 2022 **Kunming-Montreal Global Biodiversity Framework** set **Target 11** on ecosystem functions and services, including pollination (yet pollinator-related indicators are still missing). Momentum continued to build, and in 2023 the revision of the EU Pollinators Initiative '**A New Deal for Pollinators**' was presented. Civil society played a decisive role: the European Citizens' Initiative '**Save Bees and Farmers**' gathered 1.1 million signatures in 2021, calling for a phase-out of synthetic pesticides by 2035, the restoration of biodiversity and stronger support for farmers during the transition. The revision sets more granular actions to be completed by 2030 and gained further weight with the adoption of the legally binding **Nature Restoration Regulation** (NRR) in 2024, which provides the overarching framework these actions are meant to support.

INTEGRATING ZOO ACTIONS INTO NATIONAL AND URBAN PLANS

EU Member States must submit **National Restoration Plans** (NRPs) and report regularly on progress toward the targets set out in the NRR. If your institution contributes to reversing pollinator decline, engages in citizen science and plants trees to enhance ecological connectivity, these efforts may already fall under **Articles 8 and 10** of the NRR, activities your country/region is required to report on. The first NRPs are due by 1 September 2026. *Do you know which national/regional authorities are responsible for preparing the NRP and are they aware of the work your institution is carrying out?*

Another instrument relevant to many zoos are the **Urban Nature Plans**, which support cities in protecting biodiversity and enhancing urban green spaces. Pollinators feature as indicator species, and these plans include actions to improve access to nature and promote nature-based recreation. *Have you considered aligning your zoo's pollinator initiatives with your city's Urban Nature Plan to strengthen your impact and visibility?*

Learn more about Urban Nature Plans

A TALL ORDER

THE RECOGNITION OF FOUR DISTINCT SPECIES OF GIRAFFE COULD TRANSFORM THE CONSERVATION OF AFRICA'S TALLEST MAMMALS

Stephanie Fennessy, Executive Director, Giraffe Conservation Foundation

ANGOLAN GIRAFFE © GCF

The year 2025 marked a turning point for some of Africa's most beloved animals – giraffes. Long seen as a single species, new research has revealed that giraffes are in fact four distinct species: the Masai (*Giraffa tippelskirchi*), northern (*G. camelopardalis*), reticulated (*G. reticulata*) and southern (*G. giraffa*) giraffe. This discovery, confirmed by the IUCN, is transforming how conservationists, scientists and managers work to protect them.

For more than 250 years, all giraffes were thought to belong to a single species, *Giraffa camelopardalis*. That view changed after years of detailed genetic, skull morphology and spatial use studies led by the Giraffe Conservation Foundation (GCF), in collaboration with the Senckenberg Biodiversity and Climate Research Centre (Germany), University of Cape Town (South Africa), University of Madrid (Spain) and a host of partners across Africa, including governments, academia, local and international NGOs and local communities. The research showed genetic differences as deep as those separating polar bears from brown bears.

The IUCN's recent recognition of four species is not just a scientific milestone; it is a conservation game-changer, in particular as it coincided with the release of GCF's State of Giraffe 2025 report, the most comprehensive analysis ever compiled on giraffe numbers and distribution across Africa. Based on GCF's new *Giraffe Africa Database*, which brings together hundreds of surveys, government reports and peer-reviewed studies, and using a consistent system to rank data quality, it paints the clearest picture yet of giraffe populations. At the same time, through the online, public-facing GiraffeSpotter platform (https://giraffespotter.org), GCF and its partners monitor more than 30,000 individual giraffe in 18 African countries – the largest giraffe monitoring programme in history, which includes populations of all giraffe species – by turning photos into scientifically validated information.

GCF now estimates that there are around 140,000 giraffes remaining in Africa – a higher number than previously thought thanks to improved data, but still far below historical numbers. Looking at each species individually reveals a more nuanced story.

- **Masai giraffes**, found in Kenya, Tanzania, Rwanda, and Zambia, number about **43,900 individuals**. Their overall population has stabilised recently after decades of decline, although some regions, like Tanzania, remain poorly surveyed.
- **Northern giraffes** are in a far more precarious position, with only **around 7,000 individuals** remaining, down 70% since the 1990s. Within this group, the Kordofan and Nubian subspecies are particularly vulnerable. A bright spot is the **West African giraffe**, which has rebounded from just 70 individuals in the 1990s to nearly 700 today in Niger – a testament to effective protection and community involvement.
- **Reticulated giraffes** number roughly **20,900 individuals**, almost all in Kenya. Their numbers have increased by 31% since 2020 – although still down 42% from 1995 – thanks to strong conservation efforts. However, populations in Ethiopia and Somalia remain uncertain due to limited data.
- By contrast, the **Southern giraffe** is a conservation success story. With nearly **69,000 individuals**, its numbers have more than doubled in 30 years. Namibia, South Africa, Botswana and Zambia have led the way with well-managed habitats, community partnerships and successful reintroductions into other countries.

FUTURE CHALLENGES

Despite progress, all giraffe species still face serious threats. Expanding agriculture and infrastructure are fragmenting their habitat. Poaching persists in regions with weak governance, and climate change is altering vegetation patterns. Many areas, especially in Central and East Africa, still lack reliable monitoring. Recognising four distinct species allows for smarter action. Preliminary findings suggest that three species – the Masai, northern and reticulated giraffe – should be listed as Critically Endangered on the IUCN Red List of Threatened Species.

Encouragingly, countries that have created **National Giraffe Conservation Strategies**, such as Chad, Kenya, Niger and Uganda, are already seeing results. Where local communities, governments and conservation groups work together under a unified vision, giraffe populations are beginning to recover. Recognising the power of such collaboration early on, GCF has played a key role in supporting range states throughout this process, helping to unite partners, share knowledge and guide the development of strategies that reflect both national priorities and long-term conservation goals.

HOW DO ZOOS HELP?

While wild populations are the ultimate focus, zoos around the world play an important role in giraffe conservation. Many zoos support field projects run by conservation organisations like GCF, helping to protect all giraffe species in their natural habitats. Additionally, of the four giraffe species, three are currently kept in the Giraffe EEP; only the Masai giraffe with its two subspecies is not represented in the population management programme. The northern giraffe is represented by two of its three subspecies: the Kordofan giraffe (*G. c. antiquorum*) and the Nubian giraffe (*G. c. camelopardalis*), which now includes the Rothschild's giraffe. Both have always been managed and bred separately. The same applies to the reticulated giraffe – now a separate species. The southern giraffe is currently still represented by the Angolan (*G. g. angolensis*) and South African (*G. g. giraffa*) giraffe subspecies, but both are to be phased out in the medium term. The new giraffe taxonomy therefore has no influence on practical breeding management within the EEP.

LOOKING AHEAD

The reclassification of giraffe is more than a scientific update – it is a call to action. Each species has its own challenges, and now, with better data and a growing global effort, we have the tools to protect them more effectively. As the only organisation in the world that concentrates solely on the conservation and management of giraffe in the wild throughout Africa, GCF is at the forefront of giraffe conservation. By supporting collaborative giraffe conservation actions in 21 African countries and having an impact on more than 110 million acres of giraffe habitat, GCF has succeeded in bringing all four species of giraffe on to the agenda.

With continued dedication from conservationists, communities and zoos, there is hope that future generations will still see these gentle giants roaming freely across Africa's landscapes.


MASAI GIRAFFE © GCF

WHAT ABOUT THE GIRAFFE IN EAZA ZOOS?

1 Northern giraffe (*Giraffa camelopardalis*)
- *G. c. peralta* (West African giraffe) → not kept inside EEP
- *G. c. antiquorum* (Kordofan giraffe)
- *G. c. camelopardalis* (Nubian giraffe)

} Insurance populations

2 Reticulated giraffe (*Giraffa reticulata*) } Insurance populations

3 Masai giraffe (*Giraffa tippelskirchi*)
- *G. t. tippelskirchi* (Masai giraffe *sensu stricto*)
- *G. t. thornicrofti* (Luangwa/Thornicroft's giraffe)

} not kept inside EEP

4 Southern giraffe (*Giraffa giraffa*)
- *G. g. giraffa* (South African giraffe)
- *G. g. angolensis* (Angolan giraffe)

} to be phased out

CAN YOU HELP THE CHACO OWL?

A COLLABORATIVE PROJECT WITH ORGANISATIONS OUTSIDE EAZA TO SAVE THE CHACO OWL IS MAKING A DIFFERENCE, BUT MORE HELP AND FUNDS ARE NEEDED TO SECURE THIS BIRD'S FUTURE

Matt Hartley, Chaco owl EEP Coordinator, Fife Zoo

The Chaco owl (*Strix chacoensis*) is a small owl from Bolivia, Argentina and Paraguay. It is currently classified as Near Threatened, but continual population declines and poor mitigation actions suggest that a reduction to Vulnerable status is expected. Luckily, zoos and aquariums can support this species' conservation in many ways.

EAZA EX SITU PROGRAMME

The Chaco owl EEP was established in October 2023 to fulfil insurance, education and funding conservation roles, as described in the Owl Regional Species Plan. I am currently coordinating this programme, which is based at the Yorkshire Wildlife Park (UK).

Only three EAZA Members hold this owl, but many are present in non-EAZA zoos, raptor centres and private breeders in the UK, Netherlands, Italy and Germany. The priority is to identify birds, develop relationships with holders and investigate ways to establish an EEP with sufficient birds for the population to be demographically, genetically and behaviourally competent and stable.

The EEP has produced a document explaining how non-EAZA organisations can take part in the programme, what it implies for them and how they can benefit from joining forces with EAZA zoos. Understanding how EEPs work in partnership with all participants is essential to build trust between holders and to achieve the EEP goals together. This approach has resulted in four new non-EAZA EEP participation requests and in two collections generously donating birds to the programme. For the breeding period of 2026, we were hoping to add six new pairs of owls to the EEP. Expanding this work to other European countries is the next step, and assistance from Members would be greatly appreciated.

RAISING AWARENESS OF CHACO OWLS AND HABITAT LOSS

Chaco owls are attractive birds, do not require complex husbandry processes and are a valuable species for conservation education. The principal threat to Chaco owls is the large-scale deforestation and conversion of land to soya production and cattle ranches, resulting in the Chaco ecosystem being even more threatened than the Atlantic rainforest. The principal market for the meat produced from the cattle is Europe. This habitat loss is also impacting other species present in EAZA zoos, such as the Chacoan peccary (*Catagonus wagneri*) and giant anteater (*Myrmecophaga tridactyla*). So the Chaco owl provides opportunities to educate on ecosystem functioning and the interconnection between species.

A Chaco owl fact sheet containing key information about the species and its threats is available to all holders. It is very helpful for creating displays, signage and a script for flying displays and interactive sessions.

SUPPORTING FIELD RESEARCH IN PARAGUAY…

Unfortunately, the conservation of owls is made more complex by the near total lack of knowledge of their reproductive biology, habitat requirements and diet. This makes it difficult to propose effective conservation strategies to combat the challenges caused by the modern world.

The NGO Zoo and Wildlife Conservation, run by EAZA Temporary Member Fife Zoo (UK), is working with Fundación Para la Tierra to establish a research programme in Paraguay's Dry Chaco. They aim to develop an understanding of the ecological and conservation needs of the species, including population size, distribution and trends, life history, ecology and threats.

Three field trips to the Central Chaco of Paraguay will be made each year in February/March, July and October to study seasonal variations in range, habitat use, diet

UNDERSTANDING HOW EEPS WORK IN PARTNERSHIP WITH ALL PARTICIPANTS IS ESSENTIAL TO BUILD TRUST BETWEEN HOLDERS AND TO ACHIEVE THE EEP GOALS TOGETHER

and breeding behaviour. Populations will be estimated using mist netting. All individuals will be banded and morphological data recorded. GPS locations will be recorded and an assessment of the habitat at the netting location will be made. To investigate home ranges and habitat use, individuals will be tagged with remote download solar GPS tags. Diet will be investigated by locating nests and roosts, and pellets will be collected and examined as described by Santander et al. (2012). Breeding and feeding behaviour will be monitored with camera traps and breeding success will be monitored.

... WITH STAFF HOURS OR FUNDS

There is an exciting opportunity for zoo professionals to join Chaco owl project as research assistants to gain field experience. Placement opportunities will be provided to both local and international postgraduate students.

Non-EAZA EEP participant Baytree Owl and Raptor Centre (UK) has been instrumental in supporting the project, designing and producing an information poster with a 'Go Fund Me' QR code and recruiting further supporting collections. Six raptor centres in the UK are now collecting funds for the project. The Owl Trust (UK) has made a significant contribution from its conservation fundraising. This consortium of current non-EAZA Chaco owl holders has raised sufficient funds to operate the first trip in March 2026, but we need ongoing support to continue this exciting field conservation project and complete the additional seasonal field trips.

Funds can be donated to the project via this link: www.gofundme.com/f/chaco-owl-conservation

REFERENCES

- BirdLife International (2020). *Strix chacoensis* (amended version of 2018 assessment). The IUCN Red List of Threatened Species 2020: e.T22733306A177165960
- Bodrati, A. et al. (2017). 'The Owls of Paraguay' in Enriquez, P. L. (ed.) *Neotropical Owls: Diversity and Conservation*. Springer International Publishing, 619–631
- König, C., Weick, F. and Becking, J.-H. (1999). *Owls: A Guide to the Owls of the World*. Pica Press, Robertsbridge, UK
- Santander, F. et al. (2012). *First report on the diet of the Chaco Owl* (Strix chacoensis) *in the Monte Desert, Argentina*. Journal of Raptor Research 46(4): 409–411
- Tracewski, L. et al. (2016). *Toward quantification of the impact of 21st-century deforestation on the extinction risk of terrestrial vertebrates*. Conservation Biology 30(5): 1070–1079

A CHANGE OF PLANS

AS AN EXAMPLE OF THE MANY NEW LONG-TERM MANAGEMENT PLANS THAT WERE RECENTLY MADE AVAILABLE, THESE FOUR PLANS DEMONSTRATE THE ONGOING EFFORTS NEEDED TO CONSERVE A WIDE RANGE OF SPECIES ACROSS THE WORLD

Maria Balcázar-Vargas, Population Biologist, EAZA Executive Office, and Charlotte Desbois, Population Biologist, EAZA Executive Office and Mulhouse Zoo

CLOCKWISE: ZEBRA SHARK © PEDRO PINA, OCEANÁRIO DE LISBOA; HOODED VULTURE © CHRIS ELEY - HORSTMANN TRUST VARIEGATED SPIDER MONKEY © BIOPARC – CARL JONES; ECUADORIAN AMAZON PARROT © STEVE WILSON

Many new Long-term Management Plans (LTMPs) were made available on the EAZA Member Area this winter. Here we highlight four programmes that need changes to fulfil their important conservation roles.

The **Variegated spider monkey EEP** is already supported by committed holders. Some institutions manage a breeding group, while others keeping a bachelor or hybrid group contribute equally or more. In order to safeguard this Critically Endangered species, a major priority is recruiting new holders so that the population can grow to a safer size. *Ateles hybridus* is a social species with strict dietary requirements, in need of low- or no-fruit diets.

Institutions holding non-priority *Ateles* species are particularly encouraged to transition to this species. The programme also encourages EEP participants to cryopreservate gonads after any animal is deceased. This is an important method to safeguard current genetic diversity and ensure the possibility of reviving lost genetic lineages in the future. Additionally, EEP participants are encouraged to participate in research through faecal scoring and fundraise for *in situ* partners in Colombia and Venezuela.

The recently established **Hooded vulture EEP** calls for urgent, coordinated action to support this Critically Endangered species, threatened by poisoning, persecution, trade and habitat loss. To achieve the goals of the programmes, better parentage records and more species-appropriate social groups are needed. Demonstrations using *Necrosyrtes monachus* can add educational value, but require prior discussion with the EEP coordinator. In addition for this species, cryopreservation after death is encouraged to preserve genetic diversity.

The **Zebra shark EEP** aims to build and maintain several genetically and demographically viable insurance populations for both the western and eastern wild populations. This starts with identifying individual origins. The EEP will also need sufficient new holders, as the programme ultimately aims to expand each population to at least 100 individuals within 15–20 years. Institutions are encouraged to support the *Stegostoma tigrinum* Augmentation and Recovery Project (www.reshark.org/star-project) through egg contributions.

The **Ecuadorian Amazon parrot EEP** is seeking new holders capable of managing a breeding pair or a single-sex group in order to support population growth of this Critically Endangered species. EEP participants are also encouraged to continue fundraising efforts for the three *in situ* projects supported by the programme. *In situ* actions are proven to be successful for the *Amazona lilacina*'s conservation. Strong habitat protection and community-based conservation can significantly boost the species' survival prospects and all EEP participants are encouraged to get involved.

BAD 2026 PARTICIPANTS AND ORGANISERS © EAZA

ADVOCATING TOGETHER WITH YOU

HOW THE EAZA BRUSSELS ADVOCACY DAYS CONNECT YOUR WORK TO THE BROADER POLICY LANDSCAPE

Alice Albertini, EU Policy Coordinator, EAZA Executive Office

The EAZA Brussels Advocacy Days (BAD), previously called 'EU study visits', are a yearly event organised by the EAZA EU Policy team in the capital of EU policymaking. This year, on 4 and 5 February, 21 EAZA participants from 16 zoos and three national associations gathered to explore how EU decision-making affects their work and how their expertise can feed into policy discussions.

THE PROGRAMME IN BRIEF

This year's agenda featured meetings with the European Commission, the Federation of Veterinarians of Europe and the European Association of Zoo and Wildlife Veterinarians (to read more about EAZWV, see the interview with its Director on page 30). To mark the launch of Wetlands for Life, the new EAZA campaign, Wetlands International Europe introduced participants to water-related legislation and avenues for cooperation. **To learn more about BAD 2026, scan the QR code above.**

MEETINGS WITH POLICYMAKERS

A core element of BAD is the meetings that participants organise with their Members of the European Parliament (MEPs) and national representatives to discuss how EU legislation influences their daily work. This goes beyond national interests. For example, the future UK-EU Agreement on Sanitary and Phytosanitary Measures (SPS) will, it is hoped, greatly improve the movement of zoo and aquarium animals.

WHAT'S NEXT

The 2027 edition of BAD will be announced during the EU policy session at the EAZA Annual Conference in Paris. The EU Policy team and the National Associations Committee remain available to support EAZA Members organising events with policymakers. Looking ahead, our influence is stronger when we advocate together!

TESTIMONIALS AROUND EUROPE

As in every edition, BAD 2026 welcomed many newcomers. Simon Rohner, Curator at Frankfurt Zoo (Germany), reflects on his first experience.

AA: What motivated you to join BAD for the first time?
SR: Shaping the future of conservation means understanding the policies and impact we as zoos face from political institutions in Europe. I wanted to expand my limited knowledge on this front.

AA: As a first time participant, what made the biggest impact on you?
SR: Conservation topics are not a priority in the EU at the moment, which is a huge concern. However, I was amazed by the steadfastness and positive energy of NGO representatives and MEPs. Giving up is not an option!

AA: What skills or insights are you bringing back to your institution?
SR: I've returned with a clearer understanding of how the EU functions and affects our work, how to plan and hold meetings with politicians, and how to discuss challenging topics with key stakeholders.

BAD focuses on EU policy, but its themes resonate beyond EU borders, making it meaningful for non-EU participants too. Andy Hall, Communications and Public Affairs Manager at the British and Irish Association of Zoos and Aquariums (BIAZA), explains why BAD remains relevant for UK Members.

AA: How has your perspective on BAD evolved over the editions you've attended?
AH: More zoos are taking public affairs seriously and this is evident at BAD, where more institutions have clear plans for engaging politicians and achieving results. We are seeing more people with professional public affairs experience stepping up.

AA: What makes BAD relevant for UK participants despite different EU-UK policy tracks?
AH: Engaging on EU subjects has never been more relevant for UK EAZA Members. Divergence in animal health law has created problems for EAZA and BIAZA Members and negatively impacted EEPs. UK members should see BAD as a chance to bring EU and UK zoos together around this issue, as resolving animal-transfer challenges benefits us all. Beyond that, BAD is a brilliant opportunity to learn from one another – from wetland campaigns to challenges faced in France or Finland. This year, following the EAZA Executive Committee meeting, the networking opportunities were excellent!

DESIGN FOR LIVING

ZÜRICH ZOO'S FLEXIBLE HABITAT SYSTEM EMBRACES A NEW CONCEPT IN EXHIBIT DESIGN AND IS PART OF A LONG-TERM VISION TO TRANSFORM THE ZOO

Birte Fröhlich, PR Manager, Zürich Zoo

The saying *nomen est omen* ('the name is a sign') very clearly applies to the new habitat Panthera at Zürich Zoo (Switzerland). Panthera does not focus on a single species, but instead provides a habitat for all the big cats in our care – the Asiatic lion (*Panthera leo persica*), the Amur tiger (*Panthera tigris altaica*) and the snow leopard (*Panthera uncia*) – on a rotational basis.

Opened in March 2025, the concept of Panthera will serve as a model in several respects for the further development of our habitats. The rotational concept is complemented by the integrated insect forest, which deliberately provides a counterpoint to the charismatic big cats.

FROM SPECIES TO GENUS

The central idea behind Panthera is as simple as it is consistent: moving away from traditional, species-specific enclosures toward a flexible habitat system for multiple species. This is achieved through a consistently implemented rotation principle: all four areas of Panthera are interconnected and are used alternately by the three big cat species (two tigers are kept separately for most of the year) but never simultaneously. This increases environmental variability for the animals while improving infra-structural efficiency and flexibility.

As with all new habitats at the zoo, Panthera creates a world for both animals and humans. The aim was not only to meet high animal welfare standards but also to create a comprehensive and unique visitor experience. This redesign directly contributes to the zoo's long-term vision within its Development Plan 2050, which envisions transforming the zoo into a sequence of immersive habitats. Panthera is thus a building block within a larger narrative.

AN IMMERSIVE JOURNEY

From a design perspective, Panthera consistently follows the principle of immersion. The habitat is integrated into a wooded slope and makes deliberate use of topographical features to enable different viewing angles and distances. Visitors move along a network of paths that offer multiple entry points, thereby supporting different visitor flows.

A key feature is the 'catwalk', a bridge that allows the big cats to move between areas above the visitors' heads (see above). This is both functional and highly communicative: it makes the spatial interconnection of the areas tangible and creates a strong emotional experience.

This is complemented by different viewing opportunities, from open sightlines to deliberately staged 'windows' into the habitat. This diversity not only allows visitors to experience the animals from different perspectives but also gives them the opportunity to observe the many different behaviours of a cat's life – sleeping, hunting, feeding, resting, observing, patrolling and so on.

LEFT: © FABIO SÜESS,ZÜRICH ZOO; ABOVE: © TIM BENZ, ZÜRICH ZOO; ABOVE RIGHT: INSECT FOREST IN PANTHERA (C) ZOO ZÜRICH, ENZO FRANCHINI

EDUCATIONAL OBJECTIVES

The messaging within Panthera is kept simple, with only limited additional information provided for guests wishing to explore topics such as habitat loss, poaching and population fragmentation in greater depth. The main educational impact of Panthera is centred instead on the integrated insect forest, which greatly broadens the overall focus.

With around 1,500 individuals from 17 invertebrate species, it highlights insect decline and the importance of this often-overlooked taxon. At present, only three of the species being exhibited are Endangered, and initial experience is being gained with non-threatened species. As knowledge and expertise develop, these will gradually be replaced with Endangered species. The forest is located indoors and houses exclusively non-native invertebrates.

The insect forest is designed as an open, barrier-free forest in which all species can move freely. There are also no barriers such as glass panes between animals and visitors. This makes the insect forest a unique and fascinating experience with a strong 'wow' effect.

At the outdoor entrance to the insect forest, a large sign highlights the importance of insects to human life with the message 'Thank you, dear insects!' The sign also functions as an insect hotel and is surrounded by garden beds planted with a diverse selection of insect-friendly plants and flowers, supporting local insect populations. Various smaller signs placed among the garden beds highlight how humankind depends on insects; these are visible to visitors as they enter the forest. As they leave the forest, further signs offer take-home messages on how to support local insect life.

The combination of charismatic large mammals and often underestimated invertebrates is intentional; while big cats attract attention as iconic flagship species, insects and spiders enable a more nuanced exploration of biodiversity and ecosystem services. The visitor journey reinforces this approach, moving from fascination to reflection and finally to concrete recommendations for action.

INNOVATION IN ANIMAL HUSBANDRY AND MANAGEMENT

Perhaps the most innovative aspect of Panthera lies in the interplay between spatial structure and management system. The rotation principle not only enables intensive use of the available space (10,000 m^2) but also promotes exploratory behaviour and cognitive stimulation in the animals.

In addition, we employ feeding systems that simulate hunting behaviour. Particularly innovative is an electric feeding cable system that can also simulate failure by pulling prey through the enclosure at varying speeds and removing it at the end. As a result, prey does not always remain within the enclosure once it has been introduced. The keeper controls the outcome; if a cat is too slow and does not react immediately when the prey enters, the hunt will fail. The fact that not every hunt is successful deliberately reflects natural success rates and represents an important contribution to behavioural enrichment.

These approaches demonstrate how modern animal husbandry is increasingly evolving from static structures toward dynamic, process-based systems.

VALUABLE LESSONS

As with many modern animal habitats, a central challenge lies in balancing animal welfare with visitors' expectations. The decision to provide animals with retreat opportunities at all times inevitably means that they are not always visible.

Another challenge was the complexity of the rotation system, particularly in terms of management, safety and training. At the same time, this represents one of the greatest opportunities; systems of this kind offer considerable potential for future developments in flexible animal husbandry.

The realisation of Panthera, including planning and construction, took approximately three and a half years. The project budget amounted to around 10 million Swiss francs and was fully funded through donations. From the outset, development was characterised by close interdisciplinary collaboration between animal care staff, curators, architects, landscape planners and education teams.

In a global context, Panthera can be seen as part of the ongoing evolution of zoo and aquarium habitats. While species-specific enclosures will continue to play an important role, Panthera illustrates one possible approach towards more adaptive, multifunctional habitat design.

With its Panthera exhibit, Zürich Zoo has taken a further step within its own vision of transforming into a zoo of the future, as well as in its understanding of what defines a modern zoo. The combination of rotation principles, immersive design and expanded educational approaches demonstrates how animal husbandry, visitor communication and conservation can all be meaningfully interconnected.

EMMA EDWARDS LED THE DESIGN TEAM THAT DEVELOPED THE ZOOTOWN CONCEPT AND SAW IT THROUGH TO INSTALLATION

WELCOME TO ZOOTOWN!

ZSL'S NEWEST CREATION IS A CHILD-SIZED ZOO WITH BIG CONSERVATION IDEAS

Emma Edwards, Head of Communications and Content, ZSL London Zoo

The day we opened the doors to ZooTown, we watched with bated breath as the very first children (including some of our own) ran through the front doors and headlong into the space to explore. We heard whoops of joy, peals of laughter and the thundering of little feet running up and down – exactly what we had hoped to hear. But we also saw curiosity, concentration and investigation as little hands tried to build DNA blocks, find a heartbeat using an ultrasound paddle or work out what to pack in a field bag. We watched a five-year-old girl carefully bandage an imaginary wound on a soft toy lion, and a little boy build an elaborate brickwork wall around a pretend pond.

Those moments were golden because they showed we had created exactly what we hoped. Not a quick distraction or frenetic energetic play, but a place where children could play meaningfully, take responsibility and feel that what they were doing mattered.

ZooTown is the newest family space at ZSL London Zoo (UK): a miniature world where children aged from three to eight are invited to try out the roles that keep a modern zoo running. They can step into a vet clinic, a science lab, a construction area, a keeper kitchen, a post office, a café and a rehearsal studio. It looks like play, and it is. But ZooTown also shows children that caring for animals and protecting wildlife is happening in ways they might never have considered.

WHERE THE IDEA CAME FROM

The idea for ZooTown took a while to germinate. Like many parents, I spent years watching my own two children immersed in imaginative play, building worlds from very little and returning to the same scenarios again and again. What struck me was how naturally children use role play to make sense of the world and their place in it.

At the same time, our visitor insight was telling us something important. Families enjoyed their day at the zoo, but many left without a clear understanding of the breadth of the work we do. People tend to think of animals, keepers and perhaps vets. They are far less likely to picture habitat construction, conservation science, veterinary research or the logistics that underpin animal care and global conservation programmes. That wider ecosystem of expertise often remains invisible.

We wanted to make that work visible in a way that felt purposeful rather than instructional. We already have a very successful half-term activity, Vets in Action, where children examine soft toys, measure vital signs and bandage injuries under the supervision of presenters. The challenge was how to build on that appetite for hands-on engagement, serve more visitors and create something that could exist all year round.

PLAY WITH PURPOSE

From the outset, ZooTown was designed with clear learning intent. Every activity was mapped against National Curriculum learning outcomes for Early Years Foundation Stage and Key Stage 1, with additional alignment to selected Key Stage 2 objectives as stretch activities. This ensured that the play was not only engaging but also grounded in recognised learning frameworks.

Throughout the space, children use skills linked to understanding the world, physical development, communication and language, mathematics, and personal, social and emotional development. They practise negotiating space and taking turns, using tools safely, comparing quantities, following simple instructions and trying out new vocabulary. For slightly older children (we knew that we'd have both younger and older siblings in the space), activities extend into problem-solving and an understanding of responsibility and care.

This mapping gave us confidence that ZooTown was fun and more. It allowed us to be precise about the outcomes we were supporting while still leaving children in control of how they engaged. The learning is embedded in the doing, not layered on top.

INSIDE ZOOTOWN

ZooTown brings together a range of roles that collectively show how a conservation zoo functions. In the vet clinic, children examine X-rays, use an ultrasound interactive to see the beating heart of a wild dog and care for recovering plush toys. These activities support early scientific observation, fine motor skills and an understanding of health and

welfare. In the keeper areas, children sweep up zebra poo that perpetually pops out of two zebra bottoms, or prepare animal feed for butterflies and gorillas. They learn about responsibility, nutrition and the daily realities of animal care.

In the construction zone, oversized blocks and materials invite children to build habitats that include shelter, height variation and space. Here they experiment with balance and structure and using gross motor skills. In the science lab, children look down microscopes, explore the idea of DNA and interact with simplified representations of pathogens.

The post room moves children around the space by asking them to scan and sort parcels, review the content and deliver them around the town. This supports early computing concepts and mathematical thinking while reinforcing the idea that caring for animals relies on complex systems and teamwork.

One space – the play café – prompted early discussion about its relevance to the experience. We felt strongly that so-called 'cognitive anchors' would be critical to children's enjoyment and understanding of the space overall. The play café is familiar territory in an unfamiliar space and builds the confidence to explore new things.

DESIGNED TO LAST

Turning a concept into a safe physical environment required careful planning. Our in-house design and project team worked closely with external designers and fabricators. Durability, accessibility and safety were non-negotiable, but so was a sense of warmth and imagination. We ran focus groups with children early in the process to capture their ideas, test out play concepts and gather feedback, which we took into the final design. We paid attention to diversity of need. Some areas are intentionally high-energy, while others are designed to be calmer and more contained. Some activities have clear outcomes, others are deliberately open-ended.

We launched to members a month before it opened to the public and spent time observing children and making changes. We added crawl-through tents in the field camp area, wheelbarrows to the plant nursery and a slew of additional props to enhance the play experience.

WORKING DIFFERENTLY

Creating ZooTown changed how we worked internally. The project brought together colleagues from communications, learning, conservation science, design, estates and animal teams. Decisions were made collaboratively, and that process, although sometimes complex, produced a stronger result. It reinforced the idea that public engagement is not separate from conservation work. It is one of the ways in which understanding, trust and long-term support are built.

DOES IT WORK?

Since opening, ZooTown has been consistently busy. Families typically stay for their full 45-minute session and often ask whether they can stay longer. Five-star reviews often mention ZooTown, showing that visitors who experience it have a better perception of their overall zoo experience. Operationally we are still finding our feet with optimum numbers, prop replacement rate, cleaning, breakage and so on, but we're learning fast.

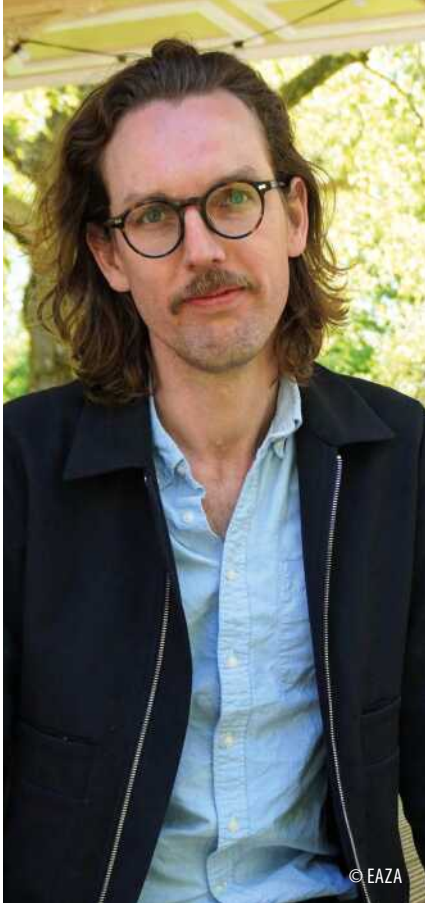
WHY IT MATTERS

For ZSL, ZooTown reinforces something fundamental. We are not only a place to see animals. We are a science-led conservation charity, and public engagement is central to our mission. If we want future generations to care about wildlife, we need to reach them early while they are still figuring out who they want to be.

For hundreds of children each week, caring about wildlife starts in a small town where a toy needs a bandage, a parcel needs delivering, and someone small enough to help takes the responsibility seriously.

STRATEGIES FOR A HEALTHY FUTURE

In 2025, the European Association of Zoo and Wildlife Veterinarians (EAZWV) appointed Allan Muir as its new Executive Director. Many in the zoo and wildlife community will know Allan from his work as EAZA EU Policy Coordinator and as Head of Veterinary Services at Durrell Wildlife Conservation Trust (Jersey). Catarina Santiago, EAZA EU Policy Coordinator, spoke to him about his new role and his ambitions for the future of EAZWV


© EAZA

CS: Allan, congratulations! Could you briefly tell our readers about your path into this field?
AM: Many of my career decisions were influenced in childhood, visiting Edinburgh and Glasgow zoos with my grandmother, nostalgic memories that shaped my views on the zoo world. I graduated from Edinburgh vet school in 2012 and completed an internship at Al Wabra Wildlife Preservation, Qatar. Then I worked in zoo and exotic practice in London before a Master's at ZSL, which opened my eyes to the numerous roles in wildlife health. I then moved into veterinary policy with EAZA while the Animal Health Law was being developed. Subsequently, at Durrell, I supported animal health and welfare globally. And now I am in the proud position of being Executive Director of EAZWV.

CS: For readers less familiar with it, how would you summarise what EAZWV does today?
AM: EAZWV is the membership association for veterinarians working in wildlife health. And 2026 is a particularly big year for us, our 30th anniversary. We've come a long way in that time. The Association works independently and with partners, including EAZA, to help vets help wildlife. Our research-driven Annual Conferences bring together around 400 delegates from across Europe and beyond.

CS: How do EAZWV and EAZA work together?
AM: EAZWV has worked closely with EAZA, through a successful Memorandum of Understanding. We collaborate through joint working groups under the EAZA Veterinary Committee. They focus on areas that have the greatest impact on population health – so data-sharing, infectious diseases, legislation and the veterinary advisors. Looking ahead, I see potential to deepen collaborations, especially through conservation medicine, with more focus on preventative health and high welfare standards, and by supporting the veterinarian at the interface of *ex situ* and *in situ*.

CS: Do you think that the skillset of the zoo veterinarian is evolving?
AM: It certainly is, reflecting what our populations and conservation work now require. Veterinarians and biologists need to be in constant communication so that decisions aren't made in isolation. Communication skills have always been important for vets, but they are becoming even more so in an increasingly polarised world, where veterinarians maintain a high level of societal trust on animal welfare. We need to feel confident speaking with the media, authorities and other stakeholders so that society understands the importance of wildlife health and the role that modern zoos play. At EAZWV, we're supporting veterinarians to contribute to population health and to discuss the evolving role of vets in modern zoos. We're updating the Veterinary Advisor Guidelines to help recruit and retain more veterinary advisors for our EEPs. We're also working on guidelines to support animal welfare during transport. This matters because animal welfare and conservation are interconnected, and much of our conservation involves animal movements.

CS: Looking ahead, what are EAZWV's main priorities for the coming years?
AM: We're entering an exciting phase. We're having a brand refresh so that our image reflects the work we do, the values we hold and the relevance of the Association. We're developing our next strategy, working with the EAZA Veterinary Committee to stay aligned for maximum impact. And we're preparing for our joint conference next year in Munich with the American Association of Zoo Veterinarians (AAZV). So, there's plenty to keep us busy.

We all recognise that health is intrinsically linked across human, animal and environmental domains. Our next strategy will place more focus on these connections and reinforce the relationships between conservation and health. We need to look after ourselves and each other while working towards common goals. At EAZWV, we'll be producing mental-health resources and ensuring the Association is an open, safe space for sharing how we're really doing.

CS: Finally, imagining EAZWV five years from now, what would you like the Association to be recognised for?
AM: I'd like us to continue the fantastic work we already do in representing and supporting our members, being a place where people can connect and grow. I'd love to see our new strategy fully launched and thriving, our brand refresh looking great and the Association moving forwards, contributing to a healthier planet.

FOLLY FARM'S BIOMASS SYSTEM IS FUELLED WITH LOCALLY SOURCED WOOD

Gareth Morris, Marketing Officer, Folly Farm

BIOMASS AND BEYOND

HOW ONE ZOO IS DEMONSTRATING ITS COMMITMENT TO SUSTAINABILITY WITH A RANGE OF MEASURES FROM BIOMASS HEATING SYSTEMS TO COMPOSTABLE COFFEE CUPS

At Folly Farm (UK), sustainability is fully embedded within our day-to-day running. We believe that people, animals and the environment are all linked. By taking care of all three, we can successfully meet our needs today while paving the way for future generations to do the same. Our goal is to offer a fun, educational and responsible experience that benefits everyone; our guests, our team, our animals, our community...and our planet.

Our attitude towards sustainability underpins everything we do, from how we heat and power our buildings to how we use materials, manage waste and nurture our landscape. Each year, we reinvest significantly in improving our systems and developing new initiatives. We see sustainability as a continuous process of learning and innovation. To help guide and gauge our progress, we have a dedicated Conservation Officer and a Green Team who meet regularly to identify opportunities for improvement. Over the years, our efforts have earned us the internationally recognised Green Key Award, confirming that we meet high standards of environmental management and sustainable tourism.

One of our focuses has been energy generation and efficiency. Working closely with local firm PBESCO Ltd. of Narberth, we invested £700,000 in a biomass heating system. It burns locally sourced wood chips to provide heating and hot water across the fairground, indoor play area, restaurant, animal exhibits, shop and staff offices. This single initiative saves around 700 tonnes of CO_2 each year and significantly reduces our reliance on fossil fuels. We later extended the same system to our holiday park, ensuring that guests enjoy comfortable accommodation powered by renewable energy.

We have found that switching to biomass allowed us to upgrade to a modern, efficient system, making future energy costs more predictable. Biomass fuel itself is carbon neutral because the CO_2 released during combustion is largely balanced by the carbon absorbed during plant growth, helping to reduce the environmental impact of heating. Additionally, biomass is a renewable energy source that can be replenished relatively quickly through plant growth, ensuring a long-term and sustainable fuel supply rather than relying on finite fossil fuels.

Complementing our biomass systems is the £250,000 installation of solar panels on the Vintage Fairground roof, generating clean electricity that even powers our electric go-karts, turning a fun activity into a demonstration of sustainability in action. We've also made hundreds of smaller energy-saving upgrades across the site, such as replacing 13,000 bulbs with low-energy versions, cutting lighting consumption by around 75% per month and saving an estimated £20,000 each year! Eco hand-driers have replaced paper towels throughout the park, while motion-activated lights ensure energy is used only when necessary. These actions may seem simple, but their combined effect is powerful, saving thousands of kilowatt hours each year.

Our most recent eco goal was to eradicate plastic drink lids from the park. We did this by introducing 'The Good Cup', a paper material that folds into an easy-to-use cup with a sip hole, no PLA lining and no plastic lid. They are fully sustainable! You can even pop them in the compost bin along with your coffee grounds and they will biodegrade within six to 12 months.

Sustainability, for us, is a journey rather than a destination. Each year brings new challenges and new opportunities to learn, adapt and improve. We're committed to continually reviewing our systems and practices, investing in technology and strengthening our partnerships with local and national conservation bodies such as the Sustainable Enterprise Alliance (SEA). Formed of local businesses, the SEA meets quarterly to offer support and advice to one another while discussing the challenges and opportunities to create a more resilient and thriving community of businesses in Pembrokeshire.

Folly Farm will keep working to ensure that we remain a place where people can have fun, learn about nature and feel part of a brighter, greener future. Ultimately, we want visitors to enjoy themselves, knowing that they support a business that reinvests in its community and its wider surroundings. A great day out can also do a great deal of good!

BUY ARTIFICIAL VINE ROPE

VINE ROPES

Ideal for aviaries, vivarium, primate islands and indoor or outdoor exhibits.
Made of a polypropylene rope covered with silicon acrylic latex, natural fibres and dyes.
Two models available: diameter 30mm (20 meters long) and diameter 50mm (15 meters long).
A stainless steel buckle at each end of the vine rope makes it easy to attach.

STAINLESS STEEL NET

Our stainless steel handwoven net is the ideal solution for accommodating all species of birds, primates and carnivores. This long-lasting solution combines optimum safety and aesthetics.

BUREAU D'ÉTUDES BIOPARC

BIOPARC'S DESIGN OFFICE
103 rue de Cholet - Doué-la-Fontaine
49700 Doué-en-Anjou - France

THEY TRUST US

Amiens Zoo (France) • Aachemer Trerpark Zoo (Germany) • Parc animalier d'Auvergne (France) • Zoo Pairi Daiza (Belgium) • Calviac Zoo (France) • Zurich Zoo (Swiss) • WoW Safari Thoiry (France) • Kölner Zoo (Germany) • Bassin d'Arcachon Zoo (France) • Wildlands Emmen Zoo (Netherlands) • La Palmyre Zoo (France) • London Zoo (England) • Ménagerie de Paris (France) • KMDA (Belgium) • Cerza (France) • Mulhouse Zoo (France) • Gaïa Zoo (Netherlands) • Beauval Zoo (France) • Haus des meeres (Austria) • La Vallée des singes (France) • Zlin Zoo (Czech Republic) • Sigean Safari (France) • Lille Zoo (France).

PRICE – CONTACT US

johanna@bioparc-zoo.fr