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ZOOQUARIA

SPRING 2026

ISSUE 129



BEETLE MANIA

HOW ALPENZOO IS TEACHING ITS VISITORS TO LOVE INSECTS



THE RETURN OF THE RHINO

RELOCATING THE EASTERN BLACK RHINOCEROS

MAKING CONNECTIONS

THE VITAL ROLE OF CENTRES FOR SPECIES SURVIVAL





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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

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FROM THE DIRECTOR'S CHAIR



This issue of *Zooquaria* contains a wealth of articles highlighting the theme of *connection* – between institutions, species experts, communities and ecosystems – and reflects the extraordinary breadth of work being done throughout the membership. EAZA and our Members continue to demonstrate that modern zoos and aquariums are indispensable contributors to global conservation: not only through the animals we protect, but also through the partnerships, science and innovation that we help to drive.

Our partnership opportunities within international conservation frameworks continue to grow. The outcomes of the IUCN World Conservation Congress and CITES CoP20, both covered in depth in this issue, highlight the essential contributions that EAZA provides towards shaping policy, advancing science and securing stronger protections for species, from co-authoring IUCN SSC Biobanking Guidelines for Conservation Purposes to CITES listing of songbirds. The expansion of the IUCN Centres for Species Survival, including several hosted by EAZA Members, further emphasises how embedded our community has become in global conservation leadership.

The impact of our connections is further evidenced by a variety of practical applications. From Rwanda comes the joyful news of further calves born to the Eastern black rhinoceroses relocated from the EEP – a success made possible by extensive planning, effective population management and trust between partners across continents. Equally inspiring are the examples of developing blue-eyed black lemur breeding hubs,

community engagement with World Civet Day and the launch of the Aquatic Mammals Emergency Response Group. These all remind us that conservation succeeds when expertise connects with cooperation.

Closer to home, Members are demonstrating how innovation can address environmental challenges within their own grounds. Rotterdam Zoo's rainwater buffering system shows how zoos can act as living laboratories for urban climate solutions, while ARTIS's Urban Night Sky Place certification highlights the importance of restoring natural rhythms in even the brightest city centres. These projects not only reduce environmental impact, but also model solutions for communities far beyond our sector.

Our connections and commitment to conservation are core strengths, and I hope you join me in feeling immensely proud of the work that we are doing together. As we continue towards meeting the 'saving species together with you' aspect of our vision, I also wanted to share a personal step towards the 'progressive' element. After admittedly a little resistance and fear of the unknown, I am attempting to *connect* with AI to investigate how this innovation can support optimisation of practices. I know many of you are already well along this journey. I look forward to sharing stories further, not least whether my authentic voice remains after AI supported me to write this piece!

Myfanwy Griffith
Executive Director, EAZA



PAGE 8: EAZA Members were among the 10,000 people who attended the IUCN World Conservation Congress, adding their voices to this influential forum © EAZA

NOTICEBOARD

CALL FOR DONATIONS

Colleagues in Ukrainian zoos are continually living and working in difficult and dangerous circumstances, including constant power outages that interrupt the supply of electricity, heating and water for prolonged periods. They also need help with the shipment of animal feed. We thank all the generous donors who have contributed to the EAZA Emergency Fund for Ukrainian Zoos (www.eaza.net/emergency-fund) and enabled EAZA to support them over the past four years with animal feed, veterinary supplies, power generators and more. The Fund's resources are running low and we urge you to please consider donating (again) if you can. Your support – financial and moral – means everything to our Ukrainian colleagues.



CONGRATULATIONS TO THE REVERSE THE RED ACCELERATOR AWARDEES

At the 2025 IUCN World Conservation Congress, Reverse the Red announced the recipients of its inaugural Accelerator Awards, designed to speed recovery action for threatened species worldwide. Nine organisations, including two EAZA Members, were selected from around 240 global applications to receive \$15,000 grants as well as strategic, promotional and networking support to implement 12-month recovery plans for threatened species.

The awardees included:

- **Bristol Zoological Society** (BZS, UK) for its project focused on the Critically Endangered turquoise dwarf gecko (*Lygodactylus williamsi*). In addition to participating in the EEP for the species, BZS collaborates with partners in Tanzania to monitor the gecko population and forest fires, conduct awareness programmes and support the diversification of local communities' income streams.
- **Zoological Society of London** (ZSL, UK) for its work on the Extinct-in-the-Wild Potosi pupfish (*Cyprinodon alvarezii*). ZSL's project will use the funding and support to advance *ex situ* and recovery efforts that could help to re-establish wild populations over time.

Both BZS and ZSL received additional support from sponsors – including Columbus Zoo (USA) – which backed their conservation initiatives, further amplifying their capacity to drive impactful species recovery work.

EAZA EVENT CALENDAR 2026



16–19 MARCH

EAZA Animal Welfare Forum
Antwerp Zoo, Belgium



13–17 APRIL

EAZA Directors' Days
Safaripark Beekse Bergen, the Netherlands



19–22 MAY

EAZA Conservation Forum
Opel-Zoo, Germany

25–28 MAY

6th Joint TAG Meeting
Taipei Zoo, Taiwan

1–4 JUNE

EAZA Zoo Horticulture Conference
Randers Rainforest, Denmark



29 SEPTEMBER – 3 OCTOBER

EAZA Annual Conference
Muséum National d'Histoire Naturelle, France

BIRTHS & HATCHINGS

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YOUNG ROLOWAY MONKEY CONTINUES TO THRIVE AT JIHLAVA ZOO

The arrival of a young Roloway monkey (*Cercopithecus roloway*) was the event of the year for Jihlava Zoo (Czechia). The success for this Critically Endangered primate species started with a pair that was transferred from Tierpark Berlin (Germany) on 13 September 2024: female Akua (born in 2017) and male Madiba (born in 2016).

The pair was housed in a brand new exhibit with an interior habitat closed to visitors to make sure the animals were safe and undisturbed in a rather busy section of the zoo grounds. They had access to wooden swings, natural ropes, bamboo logs with carved holes for insects to hide in, and toys with sliding mechanisms to get treats, all providing enrichment to the new inhabitants.

The team at Jihlava was thrilled to discover that the female was expecting. The birth took place without incident in the early hours of 31 January 2025. Akua immediately took care of the young, and Madiba checked on and defended his offspring.

The keepers left the animals as undisturbed as possible and reduced any necessary work to a minimum in the first couple of days. Everyone was very surprised that the juvenile began to separate from its mother at just one week, albeit only for short moments. By the following month, it was climbing on the mesh and running around on the shelves. Because Akua's two previous young, born in 2023 and 2024 at Tierpark Berlin, unfortunately did not survive, fresh fennel was added to Akua's diet to increase milk production. She was also given a 'nursing tea', which contained dried anise, caraway, cranberry, raspberry, rosehip, currant and sweet balm.

The young primate was clearly thriving and was exceptionally lively and playful. At the time of writing, it is still wonderful to see how vivid and independent the young female is.

Based on the information extracted from ZIMS on 1 January 2026, only 15 European institutions care for this beautiful taxon and only Jihlava Zoo, Chester Zoo and Tierpark Berlin managed to successfully breed and rear a young Roloway in 2025.



© DANIELA OBERREITEROVA

THE RETURN OF MEDICINAL LEECHES AT HIGHLAND WILDLIFE PARK

The Scottish medicinal leech (*Hirudo medicinalis*) is one of Scotland's rarest and most unusual freshwater invertebrates. A relative of earthworms, this wiggly worm is wonderfully weird.

They can swim through water with ease, cling to surfaces using two suckers, and have 10 eyes and around 100 tiny teeth.

Once widespread across wetlands, ponds and lochs, the species declined due to historical overharvesting for medical use alongside habitat loss in more recent years.

Today, the medicinal leech is listed as globally Near Threatened on the IUCN Red List and is legally protected in the UK, with any work involving collection, handling, conservation breeding or releases carried out under licence.

Its decline has been so severe that, in Scotland, the species now survives in just three locations: Islay, Oban, and Dumfries and Galloway. These remnant populations represent the last fragments of a much wider historical distribution, and each is vulnerable to changes in land use, water quality and climate.

The medicinal leech is a specialist parasite that feeds on amphibians, fish and mammals, including deer. It plays an important role in freshwater food webs, and its presence signals clean water and a thriving freshwater community. Restoring the species requires the recovery of healthy, functioning freshwater habitats as well as direct conservation action.

This is where the medicinal leech conservation breeding programme at Highland Wildlife Park (UK) is making a difference. Now heading into its third year, the project is a collaboration between the Royal Zoological Society of Scotland (RZSS), Buglife Scotland and Species on the Edge (all UK), with the aim of restoring medicinal leeches to more lochs across Scotland.

Medicinal leeches have a fascinating way of reproducing. They are hermaphrodites that cannot self-fertilise and create surprisingly beautiful, spongy egg cocoons made from their own mucus. The RZSS team has successfully welcomed 60 hatchlings from seven adult leeches over the past two years.

The 2024 hatchlings are now close to full size and are expected to contribute to the 2026 breeding season. Meanwhile, the tiny 2025 hatchlings have already tripled in size since emerging last summer and are showing excellent progress.

The long-term goal is to build a sustainable conservation breeding population for licensed reintroductions into carefully selected lochs across Scotland. By returning medicinal leeches to parts of their former range, we have an opportunity to secure a future for them, a species that connects Scotland's culture to its wild landscapes.



GOOD NEWS FOR THE CRITICALLY ENDANGERED MONGOOSE LEMUR



A female mongoose lemur (*Eulemur mongoz*) born in Ostrava Zoo (Czechia) in 2017 successfully reared her first infant in April 2024, followed by another healthy offspring in April 2025 – both females. These are the only offspring in Europe known to have survived since 2023 for the Critically Endangered species. They also represent the first successful second-generation breeding of this species at Ostrava Zoo, amazing evidence of natural parental care and an encouraging sign for the future of the *ex situ* population.

Mongoose lemurs were brought to Europe in 1958, with more individuals arriving from 1963 onward. Today, 30 individuals (18.12) are kept in 12 EAZA institutions. The *ex situ* population numbers are slightly better in the American Association of Zoos and Aquariums (AZA), and several animals have recently been transferred to Europe. Between 2011 and 2016, only four infants were born in Europe. Ostrava Zoo achieved successful births in 2017, 2018 and 2019. In 2021, the breeding pair successfully reared twin males – the only mongoose lemurs born in Europe that year.

Ostrava Zoo currently houses eight individuals (4.4). The founding pair – a female born in 2004 at Mulhouse Zoo and a male born in 2006 at the Citadelle de Besançon (both France) – live with their twin sons. They occupy a heated island house with multiple indoor areas and an adjoining outdoor enclosure available seasonally.

Another pair, kept off-exhibit in the primate house, consists of their 2017-born daughter, a male from Banham Zoo (UK, born in 2002), and their two daughters born in 2024 and 2025. In 2023, this pair had a previous offspring which unfortunately did not survive, most likely due to insufficient milk production by the mother. In April 2024, they successfully reared a healthy female and repeated this success a year later. The addition of fennel to the

mother's diet may have supported lactation, while the change of environment (relocating them near other lemur species) might also have played a crucial role. Both young now live with their parents as part of a well-functioning family group, and the older daughter has been able to observe her mother's maternal care, gaining valuable experience for her own future breeding.

These recent births mark an important contribution to the EEP. With so few individuals across EAZA institutions left and their continuing decline in the wild, every successful rearing represents a significant step towards maintaining a genetically viable and behaviourally competent population under human care. Ostrava Zoo's achievements over the past decade highlight the value of collaboration among EAZA institutions and demonstrate how thoughtful management – including tailored diets and attentive animal care – can lead to conservation successes.



BOTH IMAGES © OSTRAVA ZOO, MONIKA VLČKOVÁ

PLAYING OUR PART IN TRANSFORMATIVE CONSERVATION

THE IUCN WORLD CONSERVATION CONGRESS UNDERLINED THE CRUCIAL ROLE THAT EAZA PLAYS IN GLOBAL CONSERVATION

Merel Zimmermann, Field Conservation Coordinator, and Danny de Man, Deputy Executive Director, both EAZA Executive Office

From 9–15 October 2025, more than 10,000 conservation professionals, policymakers, Indigenous leaders, young conservationists, scientists and business representatives gathered in Abu Dhabi (UAE) for the IUCN World Conservation Congress (WCC).

Held every four years, the Congress is IUCN's largest and most influential decision-making and knowledge-sharing platform for nature conservation. During the Members' Assembly, more than 1,400 member organisations from over 170 countries debate and adopt Motions that become Resolutions guiding global conservation policy.

The Congress provides space not only to influence policy, but also to build the technical and operational partnerships needed to deliver that policy on the ground.

For the EAZA community, engagement in the Motions process has already delivered tangible strategic value, as it has strengthened recognition of the importance of *ex situ* conservation and that of zoos, aquariums and botanical gardens as conservation partners. This also creates practical opportunities to be invited for a seat at the table when guidance or policy is being developed, and it has ensured representation at the highest governance levels through elected Council positions – amplifying influence well beyond the Congress week itself.

EAZA AT THE CONGRESS

It has been great to see an increased number of EAZA Members applying for IUCN membership over the years. At the time of writing, 58 EAZA Members were IUCN Members, and at least 20 of these had representatives attending the congress in person, and other colleagues were following sessions

and voting processes via the online platform. Together they had a clear message: zoos and aquariums are essential actors in species conservation.

With the World Association of Zoos and Aquariums (WAZA) and Species360, EAZA co-hosted the session 'Championing *ex situ* conservation' in the Reverse the Red Species Pavilion. It highlighted how zoos and aquariums manage populations of threatened species using robust demographic and genetic tools and serve as trusted partners for planning and implementing species conservation programmes. The Reverse the Red Species Pavilion itself was dedicated entirely to accelerating species recovery and delivering on Kunming-Montreal Global Biodiversity Framework (GBF) Target 4: 'Halting extinctions and reversing species declines'.

WORKING TOGETHER

Newcomers to the Congress mixed with more experienced delegates from across the EAZA community and the wider WAZA community. Members contributed their expertise in sessions on, among others, freshwater conservation, the Green Status of Species, Extinct in the Wild species, genetic diversity, youth in conservation and human/nature connectedness.

For many EAZA Members, the Congress was a valuable opportunity to strengthen networks and partnerships. For instance, Dublin, Chester and Toronto Zoos formalised, signed and announced their new cryobanking alliance at the Congress, committing the zoos to work together on wildlife biobanking as a core tool to help 'put the freeze on extinction', as Chester Zoo puts it.

GUIDANCE AND OPPORTUNITIES

Several guidelines and tools, freely available at <https://portals.iucn.org/library>, were launched or promoted in Abu Dhabi and are directly relevant to zoos and aquariums. These include:

- **IUCN SSC Biobanking Guidelines for Conservation Purposes** Co-authored by EAZA Science Manager Ania Brown and EAZA Biobank Working Group Chair Christina Hvilsom, these guidelines explain how zoos and aquariums can use biobanks in a safe and effective way: what to freeze, how to manage those collections and how biobanking can directly support current and future breeding and reintroduction programmes.
- **IUCN SSC Guidelines on Responsible Translocation of Displaced Organisms** Co-authored by Sonja Luz (Mandai Nature), these guidelines walk practitioners through the key questions to ask before moving animals or plants that have been displaced (e.g. through rescue or confiscation): when translocation is a good option, when it is not, and the steps needed to plan, carry out and monitor any moves in a responsible way.
- **European Invasive Alien Species (IAS) Rapid-response Fund** Designed to help fast reactions when IAS appear or spread, this fund can support measures such as early detection, rapid removal or containment to limit damage to native species, habitats and livelihoods.
- **Global Species Action Plan (GSAP)** The GSAP is the species 'playbook' for the GBF, setting out which types of action are most needed for species conservation and who should do what – governments, IUCN Members, NGOs and others. For zoos and aquariums, it is a handy checklist to see whether their species programmes fit with global priorities and where they can add most value.

**FOR THE EAZA
COMMUNITY,
ENGAGEMENT IN THE
IUCN MOTIONS PROCESS
HAS STRENGTHENED
RECOGNITION OF THE
IMPORTANCE OF *EX SITU*
CONSERVATION**



© IUCN, TREVOR BROWN

**DECISIONS THAT MATTER FOR
ZOOS AND AQUARIUMS**

The Members' Assembly adopted 148 Resolutions and Recommendations, including the 10 IUCN Motions EAZA co-sponsored and the first IUCN policy on synthetic biology in relation to nature conservation (see *Zooquaria* 126 for more information on Motions).

**EAZA MEMBER LEADERSHIP
IN IUCN GOVERNANCE**

During the Congress, IUCN also renewed its leadership for the 2025–2029 quadrennium. Among the newly elected Council members were two representatives of EAZA Member institutions, ensuring that zoo and aquarium perspectives are embedded at the highest levels of Union decision-making:

- **Ann-Katrine Garn**, Director of Conservation at Copenhagen Zoo (Denmark), was elected as Regional Councillor for West Europe. With more than two decades of conservation experience, leadership roles across national and inter-regional IUCN committees, and a strong track record in building collaborative programmes, she brings deep knowledge of both field conservation and Union governance.

- **Ruben Khachatryan**, Founder and Director of the Foundation for the Preservation of Wildlife and Cultural Assets (FPWC, Armenia), was elected as Regional Councillor for East Europe, North and Central Asia. As a long-standing EAZA Member and leader of the Caucasus Wildlife Refuge, he brings strong experience in community-based conservation, innovative funding models and civic-space advocacy in high-risk contexts.

In addition, new Commission Chairs were confirmed, including Vivek Menon as Chair of the Species Survival Commission (SSC) for 2025–2029, who will take over from John Paul Rodriguez, who stepped down after two terms. This leadership will be central to driving the SSC's contribution to the GBF implementation, in close collaboration with zoo and aquarium partners.

LOOKING AHEAD TO 2030

During the Congress, IUCN members approved the Abu Dhabi Call to Action: a warning that the world is at a decisive moment, with climate change, biodiversity loss, ecosystem degradation and pollution accelerating, and that urgent, coordinated action is needed before 2030.

It calls on governments, business and civil society to put nature at the centre of development, strengthen international cooperation, advance justice and inclusive participation (including Indigenous Peoples, local communities, women and youth), scale science and innovation, and rapidly redirect finance and policy away from harmful activities and towards conservation, restoration and nature-positive, climate-resilient economies.

As of early 2026, IUCN had not yet announced the host country for the next WCC. What is clear, however, is that it will coincide with the deadline for the Kunming GBF's 23 action targets.

For EAZA and its Members, this represents a decisive window in which to deliver. Between now and 2030, the EAZA community can:

- scale up species recovery work that demonstrably improves Red List status;
- embed GBF and GSAP targets into institutional masterplans and conservation strategies; and
- strengthen ties with IUCN structures, including Commissions and Centres for Species Survival, so that zoo and aquarium expertise remains central to global conservation decision-making.

**THE FOLLOWING EAZA MEMBERS AND CLOSE PARTNERS
USED WCC 2025 AS A PLATFORM FOR COLLABORATION
AND VISIBILITY:**

Foundation for the Preservation of Wildlife and Cultural Assets (Armenia) • Alpenzoo Innsbruck, Vienna Zoo (Austria) • Safari Park Dvůr Králové (Czechia) • Copenhagen Zoo (Denmark) • French Zoo Association, Les Terres de Nataé (France) • Berlin Zoo/ Berlin Tierpark, Landau Zoo, Zoological Society for the Conservation of Species and Populations (Germany) •

Dublin Zoo (Ireland) • Lisbon Zoo, Zoomarine Algarve (Portugal) • Mandai Nature (Singapore) • Loro Parque (Spain) • Nordens Ark (Sweden) • Big Cat Sanctuary, Chester Zoo, Hertfordshire Zoo, Royal Zoological Society Scotland, Zoological Society of London (UK)

For these Members, the Congress offered a concentrated week in which to meet current and prospective partners, present their work and better understand how their institutional strategies can support IUCN's priorities.



CITES COP20
SAMARKAND 2025
UZBEKISTAN

20th MEETING OF THE
CONFERENCE OF THE PARTIES
 24 November - 05 December 2025



EAZA REPRESENTATIVES AT COP20 (FROM LEFT TO RIGHT): CÉCILE ERNY, ASSOCIATION OF FRENCH ZOOLOGICAL PARKS; JESSICA LEE, MANDAI NATURE; SIMON BRUSLUND, COPENHAGEN ZOO; DANNY DE MAN, EAZA EXECUTIVE OFFICE; EMMA NYGREN, NORDENS ARK; KATARZYNA RUTA, ROYAL ZOOLOGICAL SOCIETY OF SCOTLAND; TOMASZ RUSEK, EAZA EXECUTIVE OFFICE; ALL IMAGES © EAZA

FROM SILENT FOREST TO GLOBAL ACTION

EAZA CONTINUES TO CONTRIBUTE TO SCIENCE-BASED OUTCOMES THAT PROTECT WILDLIFE WHILE SUPPORTING THE CONSERVATION MISSION OF MODERN ZOOS AND AQUARIUMS

Danny de Man, Deputy Executive Director, and Tomasz Rusek, Advocacy and Communications Director, EAZA Executive Office



From 24 November to 5 December 2025, more than 3,000 delegates from over 150 countries gathered in Samarkand, Uzbekistan, for the 20th meeting of the Conference of the Parties to CITES (CoP20) – the global forum where governments and their partners decide how international wildlife trade is regulated. It was the first CITES CoP held in Central Asia, and it delivered both high-profile conservation outcomes as well as technical decisions. Parties considered more than 110 agenda items and 50 listing proposals, with 77 species added to the CITES Appendices.

EAZA attended as an official international observer NGO, representing the expertise of our Members at the interface of conservation and animal care and their practical experience with international regulations. Our role in CITES is twofold: to support measures that protect species from unsustainable or illegal trade and to help ensure that the Convention's rules continue to enable responsible,

well-documented transfers of CITES-listed animals – transfers that are essential to EAZA's mission.

SONGBIRDS: FROM A CAMPAIGN LEGACY TO A COP OUTCOME

Songbirds (Passeriformes) remain one of the clearest examples of a gap between conservation need and international regulatory protection. Despite being heavily traded, they are still underrepresented in CITES: while songbirds make up around 60% of all bird species, only 1.4% are listed under CITES. Songbird conservation was one of the CoP's major highlights for EAZA, driven by expertise and long-term lobby efforts.

A proposal rooted in specialist work in EAZA contributed to a significant result: an Appendix I listing of the great-billed seed-finch (*Sporophila maximiliani*), alongside Appendix II listing for several lookalike seed-finch species. The proposal was adopted by consensus, a proof of Parties recognising that trade-driven risks can no longer be overlooked just because a group of species is too complex or diverse. This matters not just for the *Sporophila* seed-finch species themselves, but also for the precedent: it demonstrates that well-prepared proposals and a clear scientific case can move a 'difficult'

bird trade issue into the core of CoP decisions in a way that builds consensus rather than polarisation.

BEYOND SONGBIRDS: OTHER COP20 OUTCOMES THAT MATTER TO ZOOS AND AQUARIUMS

While songbirds were a headline for EAZA, CoP20 also delivered results across other taxa:

- EAZA supported successful proposals on African hornbills, vultures, okapi and golden-bellied mangabeys, among others, and contributed to efforts addressing illegal trade in big cats and great apes.
- On tigers, EAZA's Felid TAG helped develop guidance related to tiger facility inspections and definitions around conservation breeding, contributing to a consensus direction agreed by the CITES Parties that facilities that are not part of breeding programmes should transition or be phased out.
- On great apes, EAZA worked with the Pan African Sanctuary Alliance (PASA) and other partners to get CITES Parties to agree to establish a new enforcement task force, as a practical mechanism that recognises the scale of illegal trade pressure and the need for coordinated responses.

Several technical discussions at CoP20 have immediate implications for zoo and aquarium operations:

- **Purpose Code Z:** used when permitting zoo transfers of CITES-listed species. CoP20 kept Code Z without change, recognising that it is already well defined, with only minor clarifications potentially explored before CoP21. EAZA will contribute to the discussion on Purpose of Transaction Codes as part of an intersessional working group established by the CITES Standing Committee.
- **Live animal transport:** in cooperation with AZA and WAZA, EAZA secured recognition that more transport partners should be considered to have access to IATA Live Animal Regulations (the global standard for safe and responsible live animal transports).
- **Countries of origin and endemic species movements:** EAZA contributed to the debate on this important and complex issue. We supported countries that expressed concern over their endemic



species illegally leaving their territories and advocated for clarity where institutions house multi-generational *ex situ* populations, to avoid creating uncertainty for long-established conservation populations.

- **Legal Acquisition Findings (LAFs):** these are the formal determinations by CITES authorities that a specimen has been obtained in accordance with national laws and international obligations. EAZA secured a place in the intersessional working group that will explore terminology and interpretation issues leading to CoP21.

WHAT COMES NEXT: BUILDING TOWARDS COP21

While CoP20 was a productive conference with many important consequences, it was not a finish line. The next three years will involve substantial follow-up work for our community, particularly on Purpose Codes, LAFs, live transport implementation and the expansion of global songbird conservation as an ongoing CITES priority.

EAZA will continue contributing through EU coordination, collaboration with WAZA and regional associations, work with IUCN SSC Specialist Groups, and our internal CITES structures and TAG network.

CoP20 showed that EAZA influence is strongest when three things align:

- specialist evidence and credible partners;
- practical conservation investment and on-the-ground outcomes; and
- a policy presence that is reinforced by Members' compliance and their commitment to support the fight against illegal and unsustainable wildlife trade.

LOOKING AHEAD TO COP 21

Silent Forest helped to sharpen the focus on songbirds, but CoP20 reflected a much longer journey for the EAZA community.

Over time, EAZA Members have built credibility through specialist expertise, sustained conservation investment and a clear commitment to responsible practice. The outcomes in Samarkand – including on songbirds – show how that credibility can translate into influence at the global policy level.

As attention turns towards CoP21, the task will be to consolidate these gains, ensuring that international wildlife trade rules continue to evolve in ways that protect species, support enforcement efforts and recognise the role of responsible institutions in conservation.



THE SILENT FOREST LEGACY ON THE GLOBAL STAGE: A COP SIDE EVENT WITH A CLEAR MESSAGE

Alongside negotiations, EAZA co-hosted a high-profile side event on the global songbird trade, framed as a lasting legacy of the Silent Forest campaign. The event took place on 2 December and focused on the worldwide impacts of international trade on songbird populations, underlining that the songbird crisis is not confined to one region or one set of species.

Speakers included Simon Bruslund (Chair of EAZA Silent Forest Group and EAZA Conservation Committee, Copenhagen Zoo, Denmark) and Jessica Lee (IUCN SSC Asian Songbird Trade Specialist Group, Mandai Nature, Singapore), joined by partners from conservation NGOs, government and academia. Collectively, the event supported strengthened measures within CITES and beyond, and reinforced the case for more attention for songbirds in the next years of CITES's work and at CoP21 in 2028.

One powerful element was the immersive bioacoustics experience, 'The Price of Beauty: Traded Soundscapes', filling the venue with the voices of more than 70 songbird species. It was a vivid reminder that trade decisions are not abstract policy, but choices that shape whether forests remain alive with sound in the future.



SAVING WATER BY DESIGN

ROTTERDAM ZOO'S HIDDEN RAINWATER SYSTEM NOT ONLY SAVES MILLIONS OF LITRES OF RAINWATER, BUT ALSO SHOWS HOW ZOOS CAN ACT AS TESTING GROUNDS FOR URBAN CLIMATE SOLUTIONS

ARTIST'S IMPRESSION

Maarten Vis, Member of the EAZA Wetlands for Life campaign team, Rotterdam Zoo

Water scarcity and extreme rainfall are becoming more common in many European countries. For zoos, which often combine large, paved areas with water-intensive animal care and horticulture, this challenge is particularly acute. Within the framework of the EAZA Wetlands for Life campaign, zoological institutions across Europe are encouraged to look critically at their water use and to showcase practical, scalable solutions to visitors and peers alike. One such solution lies hidden in plain sight at Rotterdam Zoo (the Netherlands).

A HIDDEN RESERVOIR

Under the historical entrance square, the zoo has installed an underground rainwater buffering system that fundamentally changes how the site deals with precipitation. Rather than directing rainwater straight into the sewer, 490 m² of modular concrete 'buffer blocks' create a water storage layer beneath the paved surface. These hollow structures temporarily capture rainwater without altering the appearance or function of the square above.

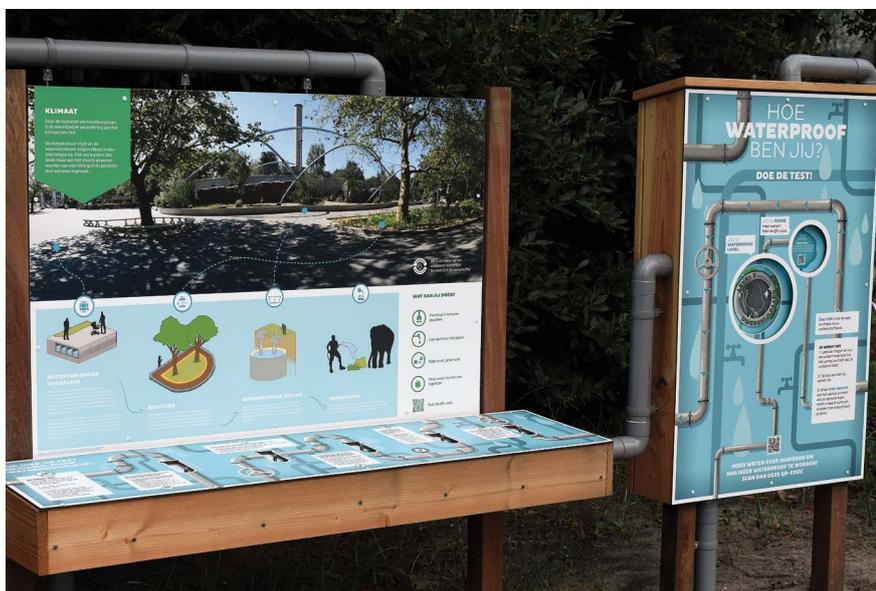
What makes the system particularly effective is its catchment area: rain

falling not only on the square itself, but also on surrounding roofs is channelled into the buffer. Before storage and reuse, the water is treated through biofilters. These natural filtration units remove debris and contaminants, producing water that is suitable for non-potable applications across the zoo. The collected rainwater is stored in a huge water tank and is used to irrigate plants and support animal habitats, reducing the need for treated municipal tap water.

MILLIONS OF LITRES SAVED EACH YEAR

The impact is substantial. The system allows Rotterdam Zoo to save around nine million litres of tap water per year – roughly equivalent to 75,000 full bathtubs. In the area served by the system, this accounts for around one third of total water demand. For a zoo located in a dense, urban environment, these water savings translate directly into lower operational costs and a smaller environmental footprint.

But the benefits extend beyond water reuse alone. By buffering rainwater on site, the system also reduces peak flows into the municipal sewer network during heavy rainfall. This helps to prevent sewer overflows and to improve water quality in nearby waterways, an



ALL PICTURES © ROTTERDAM ZOO; ABOVE: INTERACTIVE EDUCATION PANEL

outcome that aligns closely with the wetland protection goals of the EAZA Wetlands for Life campaign.

FROM FLOOD-PRONE AREA TO CLIMATE ASSET

Before redevelopment, the entrance square was susceptible to flooding and suffered from surface degradation. To install the rainwater buffer, the square was elevated and repaved to integrate the new infrastructure. The square looks unchanged to visitors and yet functions in an entirely new way. The natural filtration system creates a green area with various water-loving plants and flowers attracting a diversity of life. The project resulted from a broad partnership involving developers of nature-based water technology solutions, commercial companies, the regional water authority, the Rotterdam municipality and several universities. This multi-stakeholder approach highlights how zoos can act as testing grounds for urban climate solutions, bridging research, policy and practice.

LIVING EXAMPLES OF WATER STEWARDSHIP

Within the context of the Wetlands for Life campaign, initiatives like this offer more than just technical solutions. Zoological institutions are uniquely positioned to translate climate concepts into tangible examples. Rotterdam Zoo also uses the rainwater buffer as an educational tool, explaining to visitors how rainwater harvesting, biofiltration and climate resilience work together to protect both wildlife and cities.

For other EAZA Members, the message is clear: water-saving measures do not have to be confined to behind-the-scenes operations. Even highly visible, heavily used public spaces can be redesigned to store, clean and reuse water, often with long-term financial and ecological payoffs. As wetlands worldwide face increasing pressure from water mismanagement and climate change, the responsibility to act locally while thinking globally has never been stronger. By capturing rain where it falls, Rotterdam Zoo demonstrates how zoos can contribute meaningfully to conservation goals, reduce dependence on tap water, and inspire visitors to value every drop.

INSTALLING THE NEW RAINWATER SYSTEM



THE ENTRANCE SQUARE AFTER THE INSTALLATION



RETURNING RHINOS TO RWANDA

THE RELOCATION OF EASTERN BLACK RHINOCEROS FROM EAZA INSTITUTIONS TO AFRICA WAS A LONG AND COMPLEX PROJECT, BUT ITS SUCCESS SO FAR OFFERS NEW HOPE FOR THESE CRITICALLY ENDANGERED ANIMALS

Jan Stejskal, Director of International Projects, Safari Park Dvůr Králové, and Mark Pilgrim, Eastern black rhinoceros EEP Coordinator, supported by Chester Zoo

In August 2025, the Eastern black rhinoceros (*Diceros bicornis michaeli*) female Jasiri – transferred from Europe to Rwanda in 2019 – gave birth to her second calf. This was an important confirmation that the repatriation of zoo-born black rhinos to Africa has been successful and has significantly contributed to the establishment of a new rhino population in a country where the subspecies went extinct in 2007. In this article, we summarise one of the most complex repatriations in EAZA's history. This unique achievement did not come without some very challenging moments and reminds us that we must regard wild nature with great humility.

According to IUCN SSC African Rhino Specialist Group (AfRSG), the Eastern black rhinoceros is the least numerous of the three remaining Critically Endangered black rhino subspecies. Securing its future means protecting existing populations and exploring reintroduction opportunities into parts of their former range.

WHY RWANDA?

By the end of the 1980s, the black rhino population in Akagera National Park (Rwanda) was estimated to be between 60 and 80 individuals.

A poaching crisis followed by civil unrest and genocide in the early 1990s led to the destruction of wildlife in most of the country, and the declines continued into the following decade. The last recorded sighting of a rhino in Akagera was in 2007.

In 2010, the government of Rwanda through its Rwanda Development Board (RDB) partnered with African Parks to form the Akagera Management Company, which has restored and managed the park since then. Poaching was significantly reduced and the number of animals and visitors increased. In May 2017, Eastern black rhinos were reintroduced to Akagera from Thaba Tholo game farm in South Africa. However, due to the limited genetic base of that population, additional sources were sought.

Thanks to extremely low levels of inbreeding in the EEP and the fact that carefully managed removal of a small number of animals does not affect the long-term sustainability of the population, RDB, EAZA and the Akagera Management Company signed a Memorandum of Understanding in November 2018, aiming to collaborate on the reintroduction of black rhinos to Akagera.

YEARS OF PREPARATION

The authors first visited Akagera in late 2016 and met with park management, led by Jes Gruner. With security measurements already at the highest possible level, negotiations leading to the repatriation started immediately. With the considerable assistance of model Veronika Vařeková, an avid conservation advocate and patron of the transportation, the fundraising campaign was launched. In early 2018, the details of the project were discussed at the AfRSG meeting in Rwanda.

Five young, unrelated animals already well represented genetically within the EEP population were selected: female Olmoti from Flamingo Land (UK) and male Mandela from Ree Park Safari (Denmark), as well as two females, Jasiri and Jasmina, and one male, Manny, from Safari Park Dvůr Králové (Czechia). The first two were taken to Dvůr Králové in November 2018 so the transportation to Akagera could start from a single place.

There, under the leadership of Curator Jiří Hrubý, the younger trio – Olmoti, Mandela and Jasiri – were swapped between pens regularly and allowed some contact through barriers of iron poles to get used to

SEVEN YEARS AFTER ONE OF THE MOST COMPLEX REPATRIATIONS IN EAZA'S HISTORY, THE ZOO-BORN RHINOS ARE NOW CONFIDENTLY LIVING IN THE WILD

each other. They were then able to share the same pen. Jasmina and Manny, the older duo, were also in contact through a barrier but were kept separate until the actual shipping.

Ten weeks prior to the transportation, a false crate was built in the corridor leading to the outside enclosure to get the animals used to the small space of a crate and to people moving around. Later, the false crate was replaced with a real one and the animals were trained to enter it.

On 23 June 2019, the convoy was escorted to Prague airport, where a Boeing 747-400F left that evening. Veterinary staff had access to the rhinos during the flight, providing water and feed as needed. The aircraft landed in Kigali early the next morning, and the convoy continued to Akagera under police escort. Despite a vehicle breakdown, by late afternoon the rhinos were safely settled in their holding pens and formally handed over to RDB.

FIRST OUTCOMES

Following their arrival, the rhinos were fitted with transmitters to allow close monitoring. Keepers from Dvůr Králové supported the acclimatisation process, and the animals were gradually transitioned to natural vegetation and increasingly large enclosures. By the end of 2019, the younger trio had been released into the wild, monitored by a dedicated tracking team.

Tragically, Manny died in February 2020. Post-mortem examinations did not find a conclusive cause of death, but suggested nutritional maladaptation, indicating that he was not able to cope with the challenges of his new home, despite receiving the same care as the other rhinos. Later that year, female Jasmina, who had fully adapted to her new life in the wild, unfortunately succumbed to injuries received during a scuffle with an elephant.

NEW CALVES FOR THE RHINOS

Despite these losses, the team in Akagera stayed positive, as the other rhinos were doing well. In October 2021, trackers found Olmoti with a calf, but it died shortly afterwards. As there were no signs of external injury, the team concluded that the calf may have been unable to nurse. Although sad, it's relatively common for females to struggle with raising their first calf, and the fact that the calf was born was a good sign that these rhinos were able to reproduce even after relocation.

This was confirmed in May 2023 when a male calf was born to Jasiri, news that was even more touching considering her story. Weighing only 17 kg at birth, about half the typical weight of a black rhino calf, Jasiri was unable to reach her mother's teats. Keepers at Dvůr Králové milked her mother day and night and bottled Jasiri for over a week until she started to suckle by herself. The fact that she later grew strong enough

to be chosen for this project and was able to give birth in the wild is a beautiful conservation success and a testament to the exceptional care of the keepers.

One year later, Olmoti successfully reared her own calf, also a male. According to trackers in Akagera, Olmoti has done an exceptional job of hiding the youngster and the team saw them properly only when the calf was already a few months old.

In August 2025, Jasiri gave birth to her second calf, this time a female. According to the trackers, both the calf and Jasiri are doing well. Together with her older calf, Jasiri has since moved beyond the release area into the main part of the park. In October 2025, the older calf was fitted with a transmitter and named Juru ('Heaven' in Kinyarwanda) by Dvůr Králové rhino keeper Honza Žďárek, who had also named Jasiri (meaning 'Brave').

The father of all these calves is Mandela. He remains with Olmoti and their calf in the release area, and all three are in excellent shape. They have recently been joined by a male rhino originating from the South African founder group.

NEXT STEPS

Seven years after the translocation, we can safely state that the zoo-born rhinos are now confidently living in the wild and taking exemplary care of their calves. With three calves born to 'European' rhinos, Akagera park managers now hope that the 'European' and 'South African' population will mix in the foreseeable future. Let's keep our fingers crossed that the rhinos will also successfully complete this step.



TOP LEFT: JASIRI WITH CALF © DREW BANTLIN AKAGERA NP; PHOTO MONTAGE © SCOTT RAMSAY

AQUATIC MAMMAL RESCUE



HOW CONSERVATION ORGANISATIONS ACROSS THE WORLD CAME TOGETHER TO BUILD A GLOBAL NETWORK FOR AQUATIC MAMMAL EMERGENCY RESPONSE

Lorenzo von Fersen, Marine Mammal TAG Chair and Curator for Research and Conservation, Nuremberg Zoo; Daniel Garcia Parraga, Director of Science and Conservation, Oceanogràfic; and Forrest Gomez, Director of Conservation Medicine at the National Marine Mammal Foundation

According to the IUCN Red List, 26% of cetacean species are currently classified as Threatened, with a further 11% considered Near Threatened. This alarming status reflects the effects of habitat degradation, pollution, vessel strikes, fisheries interactions and climate change. As pressures on aquatic mammals continue to intensify, the need for a professional, coordinated emergency response network has never been more urgent.

In response to this growing crisis, a coalition of organisations, institutions and partners (see box, right) launched the Aquatic Mammals Emergency Response Group (AMERG) at the beginning of 2025. This global initiative aims to strengthen coordinated, science-based responses to emergencies involving aquatic mammals. Uniting veterinarians, biologists, animal-care professionals and institutions, AMERG ensures that interventions are scientifically sound, coordinated and aligned with the highest



FRANCISCANA DOLPHIN © AFCR3

standards of animal welfare. AMERG also focuses on capacity building to foster long-term preparedness in regions most affected by aquatic mammal emergencies.

JOINT EXPERTISE AND RESOURCES

AMERG brings together targeted qualified personnel and institutions capable of providing staff, facilities, equipment, logistics and funding. AMERG connects *in situ* emergency response – to events ranging from single-animal rescues to large-scale environmental disasters – with *ex situ*

AQUATIC MAMMALS EMERGENCY RESPONSE GROUP

These key organisations and institutions, along with multiple partners in Latin America, Africa and Asia, came together in 2025 to launch AMERG:

- European Association for Aquatic Mammals (EAAM)
- EAZA Marine Mammal Taxon Advisory Group (MMTAG)
- Nuremberg Zoo (Germany)
- National Marine Mammal Foundation (USA)
- Dolphin Quest (USA)
- YAQU PACHA e.V. (Germany)
- Oceanogràfic Valencia (Spain)
- Zoomarine Algarve (Portugal)

expertise from zoos and aquariums, applying an integrated approach to species conservation in real time.

Capacity building, crucial to AMERG’s mission, is implemented through onsite collaboration during emergencies, and facility-based training, where professionals from affected regions gain hands-on experience in partner institutions. This approach strengthens regional autonomy while maintaining global connectivity, ensuring that knowledge and skills remain locally available long after emergencies are resolved.

THE ROLE OF ZOOS, AQUARIUMS AND EAZA’S MARINE MAMMAL TAG

Zoos, aquariums and specialised marine mammal institutions form the backbone of AMERG with their long-standing expertise in veterinary medicine, animal care, life support systems, transport and rehabilitation.

Importantly, many EAZA Members are not only supporters, but also initiators and drivers of AMERG. Through the MMTAG, they actively promote the network, stimulate participation and integrate emergency-response thinking into population management, research and conservation strategies. The MMTAG also serves as a professional interface between EAZA, EAAM and international field partners.

WHY AQUATIC MAMMALS NEED AMERG

Case Study 1: Lake Tefé, Amazonia (Brazil)

In 2023, an unprecedented mass-mortality event occurred in Lake Tefé during an extreme Amazon drought. Water temperatures rose to ~40–41°C, and falling water levels dramatically reduced the lake’s volume. As a result, more than 200 river dolphins (botos and tucuxis) died within a short period. This disaster exposed the lack of coordinated emergency preparedness for large-scale aquatic mammal crises in remote regions. The Tefé event became a key trigger for the creation of AMERG.

Case Study 2: The Franciscana Dolphin Network

Franciscana dolphins (*Pontoporia blainvillei*) are highly threatened, mainly due to bycatch in coastal gillnet fisheries. Across Brazil, Uruguay and Argentina, AMERG partners support rescue and rehabilitation efforts through close cooperation with the Alliance for Franciscana Dolphin Conservation Research, Rescue and Rehabilitation (AFCR3) and local institutions.

Live-stranded Franciscana dolphins, particularly calves, require intensive, long-term veterinary and husbandry care at specialised rescue centres. Through AMERG’s emerging network, international veterinary expertise, medical supplies, diagnostics and husbandry protocols are shared to stabilise and care for these vulnerable animals.

This illustrates how AMERG connects local frontline responders with international expertise and institutional resources, improving survival chances for aquatic mammals.



CONSERVATION'S CHARISMATIC UNDERDOG

WHY ARE CIVETS MAKING SO MUCH NOISE IN THE CONSERVATION WORLD?

Cerys Deakin, Communications Officer, The Civet Project Foundation

Civets are ancient small carnivores belonging to the family *Viverridae*. There are approximately 36 extant species of Viverrid across the globe, such as the binturong (*Arctictis binturong*), common palm civet (*Paradoxurus hermaphroditus*) and African civet (*Civettictis civetta*). Civet species are generally nocturnal, and live terrestrial, semi-arboreal or arboreal lifestyles, except for the otter civet (*Cynogale bennettii*), which is believed to be semi-aquatic. As key ecosystem-engineers, civets are a vital part of wider ecosystem functioning and maintenance, dispersing seeds for many plants in their habitats. Without civets, many of their habitats would begin to degrade.

These lesser-known animals face a variety of threats, including habitat destruction, climate change and poaching for meat, the pet trade and civet coffee, which is produced from civet faeces. Unfortunately, civets have been largely overlooked by conservation science – until now.

THE CIVET PROJECT FOUNDATION

Established in 2023, The Civet Project Foundation is already the leading voice for Viverrids, raising the profile of civet species to safeguard their welfare and conservation and, by extension, to help protect the wellbeing of people and the planet.

Alongside several partners, including EAZA Members Drusilla's Park, Dudley Zoo, Drayton Manor Park and Shaldon Wildlife Trust (all UK), The Civet Project has already begun making a change by raising global awareness of civets and the threats that they face, conducting

research to fill species knowledge gaps and working with leading industry operators and policymakers to better protect civets from exploitation.

WORLD CIVET DAY

Organised by The Civet Project Foundation, World Civet Day is now in its third year, and is an opportunity to put civets in the spotlight. The 2025 edition's theme – 'Coffee' – saw a huge growth in participation and engagement, particularly in European zoos. The day raised awareness of the threats being faced by civets because of the civet coffee industry while also celebrating the progress being made. With more than 27 zoos in 20 countries taking part and over £2,000 raised – mostly thanks to zoos donating proceeds from their coffee sales – World Civet Day 2025 was a huge success.

The theme of World Civet Day 2026 – Saturday 4 April – is 'Healthy Civets, Healthy Planet', showcasing the interconnections between the health of humans, ecosystems and animals. Human-civet conflicts and unregulated civet hunting and trade not only impact animal welfare and conservation, but also bring dangerous risks, including zoonotic disease spread and potential ecosystem collapse.

CONSERVATION IN ACTION

The funds raised on World Civet Day directly support the charity's conservation, education and research efforts. For 2026, these will be directed towards the Civet One Health programme – their flagship project designed to tackle the



CLAIM YOUR FREE RESOURCES NOW!

The following resources are available when you sign up at www.thecivetproject.com/worldcivetday:

- An education pack of printable and easy-to-use activities with key educational messaging for all ages
- A fundraising pack filled with ideas and resources to help you host a community fundraising event to support our projects
- A social media pack with infographics, images and copy-paste messaging to engage with your audiences online
- A documentary pack offering a 30-minute film 'Civet Coffee: From Rare to Reckless' and exclusive access to the team who can dial in to your event for a Q&A
- 'Zoo Cut', available on request at info@thecivetproject.com – a free five-minute child-friendly documentary film, perfect for screening on TVs integrated into Viverrid zoo exhibits

Visit www.thecivetproject.com for more information and remember to tag The Civet Project in our social media coverage on 4 April.

commercial trade of civets in Vietnam by changing policy, supporting sustainability, reducing civet product demand and nurturing positive human-civet coexistence.

Zoos can play a fundamental role in civet conservation, acting as vital educators and fundraisers to support *in situ* programmes, such as Civet One Health. Start by taking part in World Civet Day 2026! It is easy, fun and engaging for zoo teams and visitors alike, and could make a real difference to this charismatic animal.



BUILDING BRIDGES FOR THREATENED SPECIES

HOW THE CENTRES FOR SPECIES SURVIVAL ARE TRANSFORMING CONSERVATION ACROSS THE WORLD

Sandrine Camus, Communications Coordinator, EAZA Executive Office

EAZA and the IUCN Species Survival Commission (SSC) have been collaborating for over a decade to maximise species conservation impact. In 2014, the 'Building Bridges' initiative was launched to strengthen connections between experts from EAZA Taxon Advisory Groups (TAGs) and SSC Specialist Groups. These connections have been essential for the success of EAZA's population management structure and progressing the One Plan Approach for species conservation.

In 2023, the crucial role of zoos and aquariums in species conservation was acknowledged in the IUCN SSC Position Statement. Simultaneously, a structured partnership model with individual institutions providing capacity and expertise towards realising SCC priorities resulted in the development of the Centres for Species Survival (CSSs).

CSSs are formal partnerships between the SSC Chair's Office and leading species conservation organisations. Each Centre hosts a dedicated team, including at least one full-time staff member who has expertise in strategic species recovery. They drive conservation efforts, focusing

on a specific animal or plant group or a thematic area of their choice, working closely with relevant SSC Groups to determine priorities. CSSs' primary roles include species assessment, conservation planning and coordinated action, delivered at global, national or regional levels, as well as sharing best practices across stakeholders.

At the global level, CSSs act as catalysing hubs for specific taxonomic groups or conservation themes. Nationally, they serve as connecting hubs linking SSC expertise with zoo and aquarium professionals, government agencies and civil society actors, supporting the delivery of National Biodiversity Strategy and Action Plans and global biodiversity targets.

The CSS partnership network continues to expand rapidly across all continents. At the time of writing, there were 25 established Centres, including 10 at EAZA Member zoos and aquariums, and many more are in development. Discover three of them here and read *Zooquaria* 125 to learn more about the CSSs at Oceanário de Lisboa (Portugal), Dublin Zoo (Ireland) and Alpenzoo Innsbruck (Austria).

IUCN CSS for Asian Songbirds and Wild Pigs – Cologne Zoo Matthias Markolf, IUCN SSC Species Survival Officer, and Theo Pagel, Zoo Director



Launched in partnership with the IUCN SSC in 2024, the IUCN CSS Cologne Zoo (Germany) serves as a global hub for protecting biodiversity. It specifically focuses on the 'Assess-Plan-Act' cycle for threatened species, with a particular emphasis on Asian songbirds and wild pigs. These two groups are often neglected despite facing serious threats.

Many wild pig species are declining due to habitat loss, overhunting and conflict with people. Additionally, the African Swine Fever (ASF) virus has devastating effects on multiple pig species endemic to Southeast Asia. By supporting the IUCN SSC Wild Pig Specialist Group, the CSS helps ensure these species are properly

assessed and included in international conservation planning, highlighting their ecological importance and the need for the One Plan Approach. Asian songbirds are another major priority. Across Asia, demand for wild-caught cage birds and ongoing habitat destruction have driven dramatic population declines.

Through close collaboration with the Asian Songbird Specialist Group, CSS Cologne Zoo contributes to extinction risk assessments, action plans and coordinated responses to the songbird crisis by combining *in situ* and *ex situ* approaches.

Examples of the CSS's substantial contribution to the conservation of these groups include the

development of a Conservation Action Plan for the Javan green magpie (*Cissa thalassina*), one of the most threatened songbirds in Indonesia. Additionally, a resolution calling for urgent action to address the Asian wild pig crisis caused by ASF was adopted at the 2025 IUCN World Conservation Congress. CSS Cologne Zoo and the Wild Pig Specialist Group took the lead to make this resolution possible. It will significantly push conservation actions for wild pigs in Southeast Asia in the coming years. Another major goal for the future is to open the CSS to the public and showcase how modern zoos can contribute practically to saving species.

In April 2025, a significant milestone was reached: the establishment of the first IUCN SSC CSS focused exclusively on Behaviour Change. Hosted by Zoomarine Portugal and developed in close connection with the IUCN SSC Commission on Education and Communication (CEC) Behaviour Change Task Force, this pioneering Centre emerged from over a decade of expanding expertise in the social sciences.

For the zoo community, and particularly EAZA Members, this is a crucial expansion of our conservation toolkit, one that addresses the often-overlooked human dimension of biodiversity protection. While zoos and aquariums have excelled at *in situ* and *ex situ* conservation, we sometimes struggle to effectively influence the human behaviours driving species decline. As it turns out, in order to save species, we have to understand human psychology as well as animal biology.

The CSS Behaviour Change has three primary objectives:

- **Creating a European hub** Making a connecting point for zoo professionals, researchers and policymakers interested in behaviour change approaches. In other words, a network that helps translate behavioural science into practical conservation solutions.
- **Integrating behavioural science** Developing standardised methodologies for designing

and evaluating interventions specifically tailored to zoo and aquarium challenges, from visitor engagement to community outreach.

- **Building professional capacity** Developing specialised training programmes based on a competency registry being built collaboratively with the Task Force, establishing frameworks that will enhance the capabilities of conservation and education teams across institutions.

For EAZA Members, this CSS offers valuable opportunities:

- enhanced conservation impact through evidence-based behavioural approaches
- innovation in visitor experiences informed by psychological research
- new professional development pathways in behavioural science applications
- expanded partnerships beyond traditional zoo networks

For support to implement behaviour change in your conservation approaches, feel free to email behaviourchange@zoomarine.pt.

This CSS represents an evolution in zoo-based conservation. By connecting behavioural science with conservation practice, we can transform our institutions into catalysts for meaningful change.

As both a zoological and botanical garden, Wilhelma Zoo (Germany) naturally chose an animal group and a plant group as its two focal points for establishing the CSS Wilhelma, in partnership with the IUCN SSC. It will work on reptiles as well as on orchids in close collaboration with the IUCN SSC Specialist Groups for these taxa.

The former honours the threats to this taxa in a world with an

ever-growing human population and the resulting conflicts, while the latter represents Wilhelma Zoo's long-standing interest in this extremely diverse plant family. Not only does the park boast a huge collection of orchids, but also it has been establishing a conservation collection for endemic Palau orchids for several years.

Following an extensive global search conducted in collaboration

with the IUCN SSC leadership, two outstanding candidates were identified at the end of 2025 to occupy the role of CSS officers. Wilhelma is now eagerly awaiting their start date in spring 2026. After several months of onboarding to familiarise themselves with the IUCN conservation tools, the CSS officers will support the relevant IUCN SSC Specialist Groups. This will primarily involve Red List assessments, conservation planning, networking and communication.

Reptiles are a diverse group; orchids include roughly three times as many species; and the threats to both groups are mounting – so there is plenty to be done! The relevant IUCN SSC Specialist Groups leaders together with the CSS officers will decide which tasks to tackle first.

We are confident that the new CSS officers at Wilhelma will be a great asset to the crucial work of the IUCN SSC network. They will also strengthen the collaboration between the relevant stakeholders, communities, field partners, experts and relevant organisations in protecting reptiles and orchids. In this world of urgent need for change, close collaboration is what we consider best practice.

RED LIST WORKSHOP FOR SULAWESI SUIDS © JOHANNA RODE-WHITE



NEW HOPE FOR BLUE-EYED BLACK LEMURS

THE CREATION OF A DEDICATED BREEDING HUB FOR A CRITICALLY ENDANGERED LEMUR COULD PROVE TO BE A NEW STRATEGY FOR THE CONSERVATION OF OTHER THREATENED SPECIES

Charlotte Desbois, Blue-eyed black lemur EEP Coordinator, Mulhouse Zoo

The blue-eyed black lemur (*Eulemur flavifrons*) is one of the most threatened primates of Madagascar and a flagship species for both *in situ* and *ex situ* conservation efforts. Endemic to the Sahamalaza Peninsula in north-western Madagascar, it faces intense pressure from habitat loss, forest fragmentation, hunting and recurrent fires, and is classified as Critically Endangered on the IUCN Red List. Given its conservation status and limited remaining wild population, the blue-eyed black lemur has long been identified as a priority species within the Prosimian TAG and has been managed through an EEP since 1992.

Following its establishment, the EEP population experienced an initial growth phase and relative demographic stability until around 2005, when a gradual decline began. This has intensified in recent years due to the species' inherently small population size, limited founder base and sensitivity to environmental and social factors. By January 2026, the EEP population consisted of only 19 individuals (nine males, 10 females) distributed across six institutions. Five individuals are currently considered non-breeding due to advanced age or medical conditions, leaving a very restricted pool of potentially reproductive animals.

HAND-REARING – THE DOUBLE-EDGED SWORD

An initial phase of population decline was linked to deficiencies in maternal care. Blue-eyed black lemurs appear particularly sensitive to stress, and several females failed to rear their offspring, abandoning or attacking their young. Hand-rearing is generally considered a last resort in primate management due to its potential behavioural consequences, but it became unavoidable to prevent immediate infant mortality. Specific hand-rearing protocols were developed and refined, with

substantial input from colleagues at the Duke Lemur Centre (USA), who have extensive experience in lemur husbandry and neonatal care. These protocols focused on improving survival rates while limiting human imprinting as much as possible. These methods proved effective in terms of infant survival, and many hand-reared individuals reached adulthood.

However, the long-term consequences of early maternal separation soon became apparent. The second and more recent phase of decline is now largely attributed to the low reproductive success



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LEFT: © M. FOOS, MULHOUSE ZOO
 ABOVE: HEALTH CHECK AT ZOO DE LA
 PALMYRE © F. PERROUX

EEP HOLDERS HAVE DEVELOPED A STRATEGY THAT OFFERS RENEWED HOPE FOR THE RECOVERY OF THIS POPULATION

strategy by creating dedicated breeding hubs. The underlying concept was to concentrate several breeding pairs within one or two specialised institutions, housed in off-show habitats, in order to stimulate reproduction and improve behavioural compatibility. This strategy is particularly relevant for the blue-eyed black lemur, a highly seasonal breeder with a very narrow reproductive window of approximately three months per year, typically between mid-October and mid-January. Conducting animal transfers between institutions during this short and sensitive period is logistically complex and potentially stressful. By housing multiple individuals within the same institution, it becomes possible to adjust pairings rapidly during the breeding season if incompatibilities arise, while minimising disturbance to the animals.

An additional key principle of the breeding hubs is the complete absence of public access. Housing the lemurs off-show reduces exposure to visitors, which is especially important for hand-reared individuals that may be overly stimulated by human presence. Reducing environmental stressors is considered essential to promote natural social interactions, stable pair bonding and appropriate parental behaviour. Following these principles, two breeding hubs were established in 2025: one at Mulhouse Zoo (France) and one at Apenheul Primate Park. These institutions were selected for their extensive expertise in lemur management, their long-term involvement in the conservation and breeding of the species, and their capacity to provide specialised off-show facilities for several pairs simultaneously. Mulhouse Zoo is now hosting three pairs and Apenheul is managing two pairs. Both parks have invested significant resources in designing or redesigning habitats to create calm environments with natural substrates, visual barriers and flexible separation options, allowing for adaptive management tailored to individual behavioural needs.

PRIORITISING CONSERVATION

The establishment of these hubs would not have been possible without

the strong commitment of four partner institutions: Zoo de la Palmyre and Calviac Zoo (France), Ostrava Zoo (Czechia) and Cologne Zoo (Germany). By transferring their animals to the hubs, these institutions accepted the temporary absence of a species that was highly valued by the public.

This decision shows a clear prioritisation of conservation over exhibition, and demonstrates the strength of collaboration within the EAZA community, as well as a shared understanding that safeguarding a Critically Endangered species requires collective responsibility. Two other institutions, Bristol Zoo and Banham Zoo (UK), hold the species and can exchange individuals when and if needed.

RESEARCH BENEFITS

Beyond their immediate breeding objectives, the two hubs also function as platforms for scientific research. Concentrating multiple pairs within the same institution provides valuable opportunities to study reproductive behaviour, maternal care, infant development and the influence of environmental factors on breeding success. At Mulhouse Zoo, the three pairs are monitored continuously using CCTV systems operating 24 hours a day, seven days a week. A dedicated student, working alongside the Akongo team, analyses behavioural data daily to assess pair compatibility, social interactions and behavioural changes over time. These observations play a crucial role in informing management decisions, including whether and when a change in pairing may be necessary.

The creation of the two breeding hubs represents a decisive and proactive response to the decline of the Blue-eyed black lemur EEP population. By combining expertise, infrastructure, scientific monitoring and a high level of cooperation among institutions, EEP holders have developed a strategy that offers renewed hope for the recovery of this population. If successful, this approach may serve as a valuable model for the *ex situ* conservation management of other highly threatened species facing similar demographic and behavioural challenges.

of hand-reared individuals. These animals often show reduced social competence, difficulties in pair bonding and mating behaviour, and insufficient maternal skills. This has led to repeated breeding failures and further reliance on hand-rearing, creating a negative feedback loop affecting population sustainability.

EEP holders have made considerable efforts to counteract these challenges. Management strategies were adapted to reduce stress, limit human contact with hand-reared individuals and promote the formation of stable pair bonds. Enclosure designs were modified, husbandry routines adjusted and introductions carefully monitored. Despite these efforts, reproductive output has remained extremely low, with the last birth in the EEP occurring in 2022 at Apenheul Primate Park (the Netherlands). The infant, a female named Alina, again required hand-rearing and was later transferred to Calviac Zoo (France), where she was paired with a male.

DEDICATED BREEDING HUBS

In response to this alarming situation, the EEP, in close collaboration with the Species Committee and the Prosimian TAG, decided to implement a new management

CREATURES OF THE NIGHT

A NEW SUBGROUP WITHIN THE PROSIMIAN TAG WILL FOCUS ON THE PARTICULAR CHALLENGES OF CARING FOR NOCTURNAL SPECIES

Zak Showell, Bengal slow loris EEP Coordinator, Shaldon Wildlife Trust

Around 70% of mammals are nocturnal, and some of the most enigmatic nocturnal mammal species that EAZA Members care for are the prosimians. From the delightfully weird aye-aye (*Daubentonia madagascariensis*) and the venomous slow lorises to the smallest primates in the world, the mouse lemurs, nocturnal prosimians display an array of fantastic adaptations and their habitats in zoos and aquariums provide incredibly immersive experience for visitors.

Thanks to Hollywood and favourable aesthetics, some species, such as the ring-tailed lemur (*Lemur catta*), the mouse lemur and even the aye-aye, are generally better known than the slender and slow lorises or galagos, by both the public and potentially even some zoo professionals.

In the recently published Prosimian RSP, seven of the EEPs are for nocturnal prosimians, reinforcing EAZA's commitment to the care and conservation of these species. However, managing nocturnal animals comes with a range of challenges. The EAZA community has built up a wealth of experience around them.

To help zoos tackle these challenges, a small team of nocturnal enthusiasts have recently formed the Lorises, Galagos and Nocturnals

Group (final name pending!), a subgroup of the Prosimian TAG. Their mission is to raise the profile of all nocturnal prosimians and champion EAZA as a bastion for nocturnal primate welfare, research, conservation education and beyond.

The group will be collaborating with the Prosimian TAG and the wider EAZA community to further develop these goals, so all suggestions are welcome.

As a community we must continually look for opportunities to assist and build capacity within the global zoo and conservation sphere. The Prosimian TAG created an incredibly in-depth best practice guideline for lorises, and we want to find ways of disseminating this information to zoos and rescue centres across the world. Whether this is through workshops, webinars or translations, we want to share the best practice we've developed to improve the situation for thousands of lorises held in rescue centres across Asia.

We are very fortunate that two of the members of the Lorises, Galagos and Nocturnals Group also sit on the Asian Nocturnal Primate Specialist Group of the IUCN Primate Specialist Group, which is chaired by Professor Nekariz. By integrating our newly formed group into this IUCN Working Group, we can ensure a One

WILD SLOW LORIS, THE KUKANG RESCUE PROGRAM FIELD SITE © LUCIE CIZMAROVA

THE GOALS OF THE LORISES, GALAGOS AND NOCTURNALS GROUP

- To identify and prioritise EAZA Prosimian TAG target species within the new Lorises, Galagos and Nocturnals Group
- To establish small task forces focused on specific species or thematic topics – more group members are needed!
- To develop practical husbandry guidelines applicable to the selected target species, usable both in zoological institutions and relevant rescue centres

EXAMPLES OF POTENTIAL FOCUS AREAS AND SUPPORTED ACTIVITIES FOR LORIS SPECIES

(similar can be considered also for galagos and other nocturnal prosimian species):

- Research: support the ongoing pygmy slow loris (*Xanthonycticebus spp.*) EEP taxonomy survey
- Develop a long-term breeding and population sustainability recommendations for the Pygmy slow loris EEP as the only viable slow loris population currently managed within EAZA
- Address the broader *ex situ* management strategy for *Nycticebus* species within EAZA collections
- Explore a long-term breeding and management plan for slender loris taxa where applicable

Plan Approach, grow our network of contacts and ensure that the EAZA community is represented at the IUCN table.

So, if you love a loris, are mad for mouse lemurs, go gaga for galagos or treasure tarsiers we need you! Working groups are only as strong as their membership and we look forward to welcoming more members to champion the dark side of the Prosimian TAG.

THE SHIFTING VIEW ON HYBRIDS

RECENT RESEARCH INTO HYBRIDISATION SUGGESTS THAT WE MUST THINK AGAIN ABOUT WHETHER TO EXCLUDE HYBRIDS FROM OUR POPULATION PROGRAMMES

Elmar Fienieg, Population Management Centre Manager, EAZA Executive Office; Laura Bertola, Board Chair, Leo Foundation; and Peter Galbusera, Researcher, Antwerp Zoo

It can be challenging for EEP Coordinators and TAGs to make decisions related to hybridisation; for instance, whether to mix animals with different origins or morphology or whether to exclude known hybrids from breeding. These decisions should be made based on the latest science. Within conservation genetics, the view on hybrids has changed significantly in recent decades, as highlighted by a string of publications, including the recent Galbusera et al. (2025). In this article, we highlight how this evolving view may change the way EAZA zoos and aquariums manage hybrids.

MANAGING HYBRIDS

Because taxonomic insights evolve over time alongside the latest scientific discoveries, individuals can suddenly be found to be hybrids between subspecies or even species. And although the effect of a low degree of hybridisation may hardly affect an EEP's gene pool, hybridisation can have far-reaching consequences if it is perceived by governments and NGOs to compromise the potential of that gene pool as a source for reintroduction.

However, excluding hybrids from an EEP can be overly stringent, reduce genetic diversity and population size,

and therefore risk compromising the success of an EEP. EEP Coordinators should assess the impact of both including and excluding hybrids from breeding carefully.

SPLITTING VERSUS LUMPING

Taxonomy is never fully resolved, which is why TAGs tend to be conservative and keep individuals with known different origins or morphologies separate. There can be good grounds for this – for example, where the focus is on a specific subspecies and a healthy insurance population can be established.

However, there can also be good arguments to lump different populations, such as where it seems that there are no subspecies after all, or because a species-level insurance population with higher genetic variation is more valuable for conservation. Even then, there is a tendency to postpone action and to wait for more data. However, fully conclusive data may never arrive, and unnecessary delays can lead to unnecessary risks and logistical challenges. These delays are partially based on the misconception that a population cannot be separated out into the original genetic lineages after a few generations of breeding together. However, a species is not a single genetic identity. In fact,

it is quite the opposite; a healthy population consists of individuals that are genetically very varied. The gene pool of a population is not like a bucket of paint that remains forever green after mixing blue and yellow. It is more like a collection of coloured construction bricks that can be selected and assembled. With the use of molecular genetic tools and strategic selection, widespread hybridisation is effectively reversible, not by removing hybrids altogether from the population, but by selecting the right hybrids to breed from.

CONCLUSION

There is no unique solution to managing hybrids, and each relevant EEP needs to carefully weigh the risks and benefits of splitting versus lumping their population. One certainty emerges, though; as the view of conservation geneticists on hybrids shifts, it is important that the view of the EAZA community shifts along with it so we can optimise our conservation impact.

REFERENCE

Galbusera, P. et al. (2025). *Hybrids Along a Natural-Anthropogenic Gradient: Improving Policy and Management Across All Levels of Biodiversity*. *Conservation Letters*, 18(6)

THE AFRICAN LION EXAMPLE

Within the EAZA community, the African lion EEP has been split to set up an insurance population for the Northern lion subspecies (*Panthera leo leo*) as a response to the alarming situation in West and Central Africa. Through a combination of both pedigree and genomic information, the aim is to move gradually towards a population for the Northern and Southern subspecies. Such a splitting exercise is not easy and does take multiple generations. However, the alternative of keeping units separate can also be a risk. Separated populations are smaller and small populations are at risk. Most people will even prefer a hybrid over losing a species altogether.



VACCINE HOPE FOR ZOO BIRDS

A NEW VACCINE COULD PROVE TO BE A TURNING-POINT IN THE FIGHT AGAINST LETHAL AVIAN INFLUENZA

Stefan Hoby, Elisabeth Heiderich and Marion Stettler, Veterinarians, Bern Animal Park; Christian Wenker and Fabia Wyss, Veterinarians, Zoo Basel

In recent years, avian influenza has caused mass die-offs among wild birds and infections in more than 50 mammal species. Sadly, the deadly outbreaks are also affecting animal populations in European zoos and aquariums. Several institutions have recently reported fatal infections among the birds they care for, particularly those kept in natural pond enclosures that are frequently visited by wild waterfowl.

Despite EU regulations allowing individual member states to approve vaccination against avian influenza in zoos, many countries have not implemented this option. Therefore, zoos often rely on strict biosecurity measures as their primary defence against these highly pathogenic viruses. Some EAZA zoos use vaccines approved for poultry, while others, including Bern Animal Park and Zoo Basel (Switzerland), have been involved in experimental research studies.

COLLABORATING FOR A SOLUTION

In the winter of 2022, a Dalmatian pelican (*Pelecanus crispus*) died at Bern Animal Park after contracting a highly pathogenic H5N1 avian influenza (HPAI) virus (clade 2.3.4.4b). The infection most probably resulted from a spillover event involving a wild grey heron (*Ardea cinerea*) that was found dead in the enclosure shortly before the pelican's death. Prolonged quarantine measures were therefore implemented for the zoo birds, but this led to serious health problems, including severe pododermatitis and critical welfare restrictions.

The nearby Institute of Immunology and Virology (IVI, Mittelhäusern, University of Bern, Switzerland) offered to collaborate with the zoo to find a solution. The innovative team led by Gert Zimmer developed a genetically engineered vector-based vaccine based on a modified vesicular stomatitis virus (VSV), in which an essential envelope gene was replaced by the H5 hemagglutinin gene from the deceased pelican. This adjuvant-free vaccine was first tested in the laboratory. Results showed that it



A GREATER FLAMINGO RECEIVES A NOVEL VECTOR VACCINE
© BERN ANIMAL PARK

fully protected chickens from lethal H5N1 infection and prevented viral shedding.

PROMISING RESULTS

The next phase of the study aimed at testing the vaccine on zoo birds and included 317 birds, from Bern Animal Park and Zoo Basel, across 23 bird species, such as greater flamingos (*Phoenicopterus roseus*), African penguins (*Spheniscus demersus*), Dalmatian pelicans and eastern white pelicans (*Pelecanus onocrotalus*). Thirty-one birds served as non-vaccinated controls. No vaccination-related adverse effects

were observed, and vaccine-shedding was not detected when analysing faecal and pondwater samples. Birds without prior exposure to HPAI viruses developed strong antibody responses after two vaccine doses. Previously exposed birds responded after a single vaccination. One year later, 98.7% of the vaccinated birds retained significant neutralising antibody levels, probably indicating durable protection.

These findings suggest that the novel vaccine is a safe, effective vaccine candidate for broad protection against H5N1 across diverse avian species. This vaccine also shows promise in terms of differentiating vaccinated from infected birds. These results were published recently in *Nature Communications**.

We believe that the current vaccine – once optimised for large-scale deployment – could represent a turning-point in the fight against HPAI. It could help to protect both wild and *ex situ* birds while reducing sanitary measures that may compromise animal welfare. Unfortunately the vaccine has not yet been officially approved; we are therefore looking for collaborators to try to bring this vaccine to market.

REFERENCE

*Stettler, M. et al. (2025). *RNA replicon vaccination confers long-lasting protection against H5N1 avian influenza in 23 zoo bird species*. *Nature Communications*, 16:9245

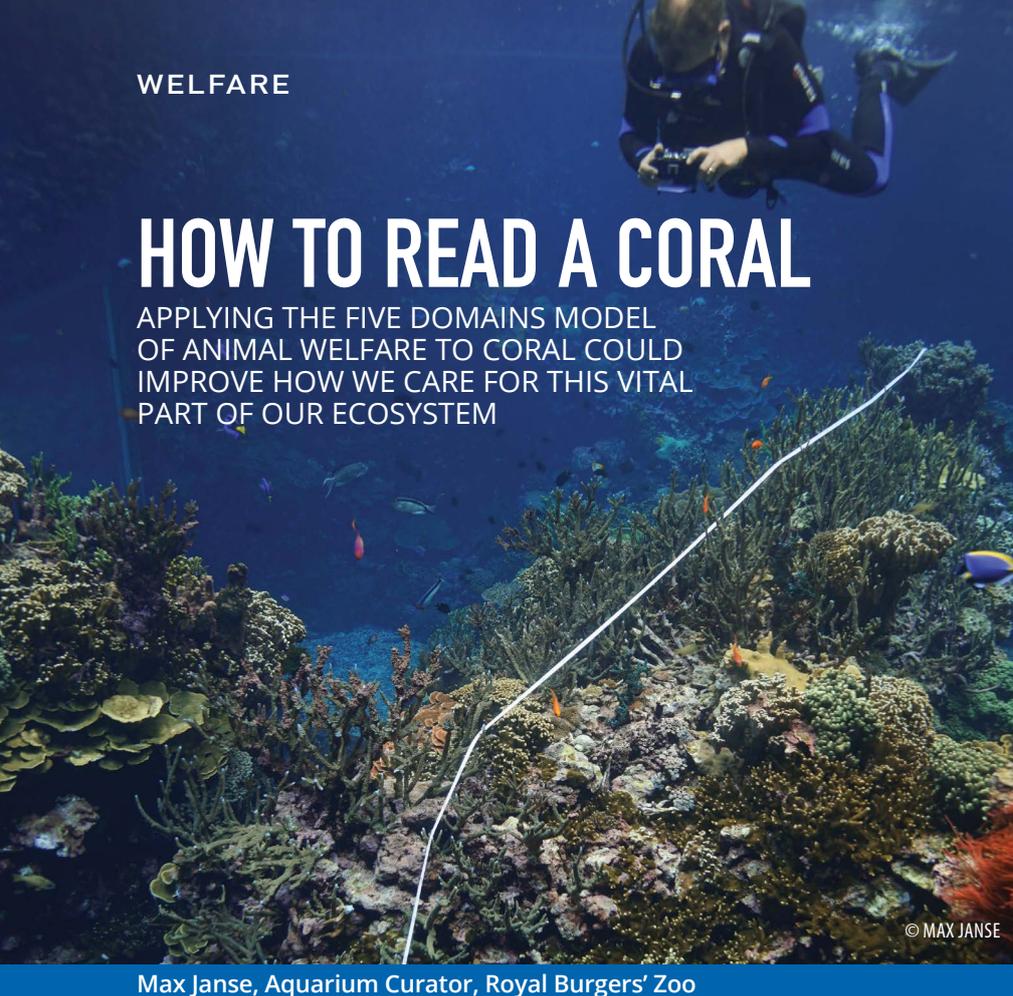
CURRENTLY AVAILABLE VACCINES

There are currently three commercially available HPAI H5 vaccines on the market in Europe for zoo birds (being on the market in at least one member state enables use in all EU member states):

- *MSD Nobilis H5N2* (inactivated) has been used for years in Denmark and France, and occasionally in some other member states.
- *CEVA Respons* (mRNA based vaccine) was used in Hungary and Belgium under an experimental umbrella in 2025, and is allowed in France for a 2025–2026 campaign, where it is currently studied on heterologous use, especially on ratites, penguins and birds of prey.
- *Boehringer VOLVAC B.E.S.T.* (inactivated subunit vaccine using an insect Baculovirus) has been approved for the vaccination of ducks in France and is currently experimentally evaluated in selected Swiss zoos.

HOW TO READ A CORAL

APPLYING THE FIVE DOMAINS MODEL OF ANIMAL WELFARE TO CORAL COULD IMPROVE HOW WE CARE FOR THIS VITAL PART OF OUR ECOSYSTEM



© MAX JANSE

Max Janse, Aquarium Curator, Royal Burgers' Zoo

The title of this article could be applied to every animal species in zoos or aquariums. Understanding an animal, its behaviour, its biology and how and what it communicates are just the start of a long list of questions you might ask yourself when caring for a species.

Species-specific welfare assessments touch on this subject in a wider sense. These assessments often use the Five Domains Model (described by Mellor D. et al. 2020), which includes **nutrition, environment, behaviour/ interaction, health** and **mental status**. In a recent EAZA animal welfare webinar, I explored how this model could be adapted to corals.

Corals are invertebrates belonging to the taxonomic phylum of coelenterates; the wide species variety results in a broad range of husbandry needs. The species complexity ensures that there is no 'one answer fits all'. So for this article, let's stick to the tropical stony corals belonging to the *Scleractinia* order, covering more than 1,200 species. These corals have a calcium carbonate skeleton and many have symbiotic dinoflagellates (zooxanthellae).

Nutrition (1) in corals has a lot to do with the right light intensity

and colour, which will induce photosynthesis within the symbionts. Part of the produced sugars will be given as 'rent' to the coral host. Some staghorn corals are 100% dependent on this food source while other corals still need extra external feeding, such as phyto- or zooplankton or (particulate or dissolved) organics in the water.

The complexity of coral husbandry lays more in the **environment (2)** than the coral. In this domain, light quality comes up again, as well as water movement and water quality (e.g. temperature, salinity, pH, nutrients and macro and trace elements).

The **behaviour and interaction (3)** domain is an interesting one in coral welfare. Corals can reproduce asexually and sexually. The larvae will make the most important decision of its life: 'where to settle'. From then on, this sessile animal will not be able to move, although its growth will make it possible for it to interact

with its neighbours using destructive techniques. Space availability is one of the most important survival strategies for a coral: fighting for light means staying alive.

Maintaining coral **health (4)** is complex and can be a challenge. Corals can easily be physically damaged by corallivores or inappropriate handling, overgrown by algae or be covered by sediments or other life forms.

Chronic or acute stress caused by water quality issues, sedimentation or changes in light conditions, temperature, pH or salinity can affect coral health, as well as viruses, fungi, bacteria and unicellular or metazoan parasites.

Knowledge of coral disease issues is increasing, although successful treatments are still limited due to the sensitivity of the coral itself. Corals are also referred to as a holobiont, which is a combination of many organisms (e.g. bacteria, archaea, fungi) living together in a complex interaction. A slight disbalance within the holobiont can cause health issues in the colony.

This brings us to the last domain, although **mental status (5)** does not apply to corals. Corals have a neurological network, but no central nervous system to react to the 'results' of the first four domains. Therefore, coral welfare should concentrate on the first four domains – or the last domain could be replaced by a 'biotope status'. The biotope status is the result of the first three domains and should ensure good coral health. Here the 'holobiont' is extrapolated to the whole biotope, showing the complexity of multiple interlinked factors.

The complexity of the 'biotope state' is illustrated further *in situ*, where coral reefs are decreasing at an alarming speed due to climate change, ocean acidification, pollution, destructive fishing and other factors. This shows the need for further management of the *ex situ* population within the EAZA community, and this task was duly taken on by the EAZA Coral TAG, which was launched in 2025.

FOR MORE INFORMATION

- Watch Max's webinar on the EAZA YouTube channel: <https://youtu.be/eb11JG2N9Ug>
- Read Mellor, D. et al. (2020). *The 2020 Five Domains Model: Including Human-Animal Interactions in Assessments of Animal Welfare*. *Animals*, 10(10): 1870

EXHIBIT

TACKLING THE CORAL CRISIS

THE REFURBISHMENT OF ITS VIVARIUM TANKS IS THE LATEST STEP IN ZOO BASEL'S MISSION TO CONSERVE THE WORLD'S CORAL AND RAISE AWARENESS OF ITS FRAGILE STATUS

Fabian Schmidt, Curator, and Daphne Papadopoulou, Education and Nature Conservation specialist, both Zoo Basel

Over the last few years, Zoo Basel (Switzerland) has been refurbishing its coral reef tanks as part of a wider mission to help raise awareness of these threatened habitats, which suffer from overexploitation and climate change.

Tanks 25 and 27 were the last of the tanks to undergo renovation: the foundation walls have been repaired, the glass panel swapped out, the decorations replaced and all of the technological systems updated. The tanks have now been back in operation for a couple of months, and form part of the vivarium's tropical seas section. They focus on the theme of the coral reef, and supplement two additional tanks (21 and 23) by showcasing different habitats from the coral reef.

A PLACE FOR EVERY REEF

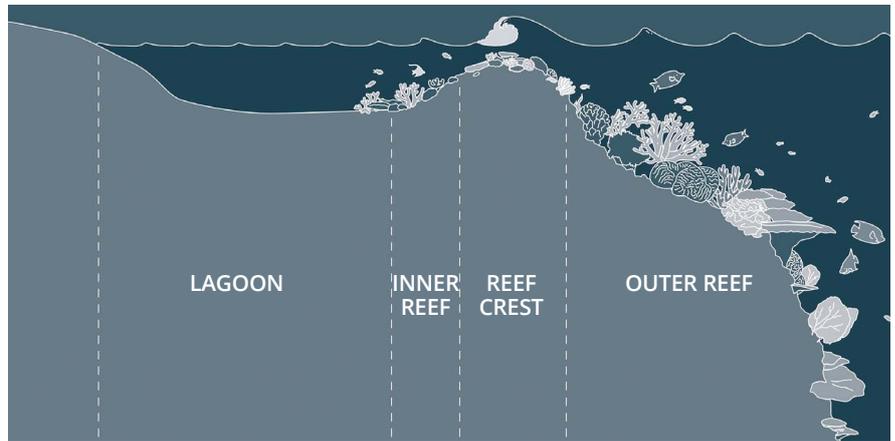
While tank 21 contains mostly coral fish species that feed on coral, the other tanks showcase the coral more prominently alongside the fish. Tank 23, which was completed some years ago, shows the back reef – the part facing the coast but protected from the waves. Tank 25 is now devoted to the reef crest – the highest point in the coral reef, separating the back reef from the outer reef. This outer reef, which faces the open pelagic ocean, is presented in tank 27.

ALWAYS EVOLVING

As in the wild, change is a part of the everyday life of the coral reefs in our vivarium tanks. The rocks are initially populated with what are known as pioneer species. These will then be displaced and replaced by other species over time.

Typical pioneer species are specifically cultivated in tank 25 and transferred to tank 27 once they reach a set size. These include cabbage coral (*Montipora foliosa*), smooth cauliflower coral (*Stylophora pistillata*), lace coral (*Pocillopora damicornis*) and green birdsnest coral (*Seriatopora caliendrum*). Table coral (*Acropora hyacinthus*) and strawberry shortcake coral (*Acropora microclados*) are the more sensitive species that give the reef crest its characteristic table shape. They will be introduced to tank 25 at a later stage.

The actual reef is primarily made up of stony and horn corals. Finger coral (*Sinularia brassica*), Kenya tree coral (*Capnella imbricata*), yellow leather coral (*Sarcophyton elegans*)



and dead man's fingers (*Alcyonium sp.*) are also joined in the reef by soft coral.

A BIODIVERSITY HOTSPOT

In addition to corals, other invertebrates such as snails, mussels, cleaner shrimps, crabs, sea urchins and brittle stars clean the reef, especially of algae. The final ingredient in the reef environment is the fish. Tank 27 is primarily home to various surgeonfish and the blue-girdled angelfish (*Pomacanthus navarchus*) whereas tank 25 also contains wrasses and dwarf angelfish. Yellowback anthias (*Pseudanthias evansi*) always move in schools, while the Moorish idol (*Zanclus cornutus*) is solitary.

Coral reefs offer particularly high levels of diversity and are known as 'biodiversity hotspots' that play a vital role in efforts to combat marine fauna depletion. Tanks 25 and 27 in the vivarium are also the tanks with the widest range of species, including 75 species (seven fish, 56 corals and 12 invertebrates) and 35 species (five fish, 22 corals and eight invertebrates) respectively.

DEDICATED TO FIELD CONSERVATION

In addition to raising awareness of corals in the vivarium, Zoo Basel has been committed to protecting marine ecosystems in Zanzibar since 2015, together with the organisation marinecultures.org. The organisation has successfully established sustainable sponge farming practices and gained extensive experience in the restoration of coral reefs. Previously, they used the tried-and-tested method of asexual coral reproduction by fragmentation. Now, marinecultures.org is launching a new coral project, researching sexual coral reproduction and implementing it for the first time ever in the West

Indian Ocean region, in Jambiani (Zanzibar). The aim is to increase corals' genetic diversity and thus give damaged reefs longer-term resistance to the impact of climate change. To this end, an economical, low-maintenance laboratory has been set up in Jambiani to fertilise the ova collected with sperm cells and grow them into larvae. The larvae then develop into young coral on suitable substrates.

SUPPORTING RESEARCH, TRAINING AND INFORMATION

A research, training and information centre, with a laboratory at its heart, is currently under construction in Zanzibar thanks to Zoo Basel's financial support. Accompanying information services seek to make the local community and visiting tourists aware of the importance of healthy coral reefs and raise awareness of marine ecosystem conservation. Marinecultures.org also offers a training programme aiming to teach the new method to the entire West Indian Ocean region so that local organisations can use it in the future to run their own coral restoration projects.

ONE FRANC TO CONSERVE NATURE

Zoo Basel visitors can choose to add a Swiss franc to the cost of their entry ticket to benefit nature and species conservation. Since this voluntary contribution was introduced in 2016, it has generated around CHF 3 million for the zoo's conservation fund, including CHF 354,000 collected in 2025. This has enabled Zoo Basel to support not only the marinecultures.org coral project, but also a wide range of other projects helping the conservation of threatened species and their habitats. The zoo provides regular updates about the progress and achievements of these projects to their visitors.

FROM DECAY TO DIVERSITY

HOW ALPENZOO INNSBRUCK IS ENGAGING THE PUBLIC IN THE CONSERVATION OF THE ALPINE LONGHORN BEETLE

Juliane Pokorny, Curator, Alpenzoo Innsbruck

It is easy for zoos to inspire visitors with charismatic mammals, colourful birds or even striking reptiles. But insects – usually small, often inconspicuous or hard to observe – rarely enjoy the same level of attention. At Alpenzoo Innsbruck (Austria), however, insects are an essential part of our mission: the conservation and communication of alpine biodiversity. One species in particular has become a surprising ambassador for forest ecology and deadwood habitats: the Alpine longhorn beetle (*Rosalia alpina*).

In recent years, Alpenzoo has developed some creative hands-on installations that bring this threatened beetle and its habitat into the public eye and illustrate how 'decay' in nature is not a sign of neglect, but a foundation for rich ecological diversity.

WHY INSECTS NEED SPECIAL APPROACHES IN ZOOS

While Alpenzoo specialises in alpine species, presenting alpine insects is notoriously difficult. Many require extremely specific habitats with special plants, microclimates or even symbiotic relationships. The technical effort involved is usually quite high. Their life cycles are very short, seasonal or stretched over several years, making it nearly impossible to keep them visible for visitors throughout the year. Furthermore, many alpine insects are legally protected, which restricts wild collection. As a result, husbandry experience is limited, and breeding success is often unpredictable.

These challenges make traditional animal presentations impractical. Meaningful public engagement requires well-designed educational materials and creative storytelling.

Alpenzoo's first successful experience in insect education came in 2018 with the Sumsi World – an installation that introduced visitors to wild bees. The overwhelmingly positive response inspired the team to spotlight the Alpine longhorn beetle, another ecologically important but underappreciated insect.

A BEETLE SHAPED BY DEADWOOD

The striking blue *Rosalia alpina* is native to the mountainous regions of Central Europe. Its preferred habitat consists of open, sunlit beech or mixed beech forests rich in deadwood. These forests once formed extensive landscapes across alpine regions, but decades of intensive forestry have drastically reduced them.

The beetle's larval development, which lasts around four years, usually takes place in dead or dying beech and sycamore maple trees. As traditional forest management removed deadwood and converted mixed forests into dense spruce monocultures, suitable habitats declined sharply. Today, the species is legally protected throughout Europe.

In Austria, a nationwide action plan was launched in 2010 in cooperation with the Federal Forests. The plan focuses on habitat-appropriate forest management and retention of old deciduous trees. Alpenzoo has been part of this effort since 2019, with tasks centred on public outreach, conservation education, and participation in breeding and reintroduction initiatives.

A PLAYFUL APPROACH

In 2020, Alpenzoo developed the Alpine Beetle Station, a simple but charming installation designed to introduce visitors – especially children – to the species. At its centre stands an oversized, climbable wooden model of the blue longhorn beetle. This tactile element instantly encourages playful engagement, transforming an inconspicuous insect into a memorable character.

The station also includes an information panel with illustrations and descriptions of the beetle's ecology, lifecycle and conservation status. Complementing this, five large maple and beech logs containing naturally laid beetle eggs were installed as a controlled breeding station. The logs were wrapped in nets to protect the larvae and to ensure safe and observable emergence.





LESSONS LEARNED: HOW TO MAKE THE INVISIBLE VISIBLE

After several years of experience, Alpenzoo has learned some valuable lessons about successful alpine insect education:

- Insects need creative presentation**
 Insects' size, seasonality, life cycles and behaviour limit live exhibits. Artificial models, well-designed educational materials or installations with tactile elements, and storytelling compensate effectively.
- Playfulness is essential**
 Whether through oversized models or hands-on installations, learning in a playful and self-explanatory manner works for both children and adults.
- Outdoor installations must be robust – and replaceable**
 Harsh alpine conditions and high visitor interaction make regular repairs and replacements inevitable.
- Even 'uncute' species can spark interest and curiosity**
 Once visitors understand their ecological role, insects become ambassadors for ecosystems often overlooked in zoo settings.
- Deadwood is an excellent gateway topic**
 It links forest ecology, species conservation, climate resilience and biodiversity – and it surprises visitors who assumed deadwood is 'just rot'.



The response exceeded expectations. Children loved the giant beetle model, and adults appreciated the clarity and accessibility of the information. For many visitors, it was their first time realising the importance of deadwood – and the beauty of a beetle they might otherwise never have noticed.

EXPANDING THE VISION: THE DEADWOOD STATION

Encouraged by the Beetle Station's success, Alpenzoo expanded the concept in 2021 by developing the Deadwood Station, a larger and more comprehensive installation that was built around the ecology of decaying wood.

Deadwood is often misunderstood. Historically, it was considered messy or dangerous, something to be removed from 'healthy' forests. In some regions, this belief persists. Yet scientific evidence paints a different picture: deadwood is a biodiversity hotspot.

Across Central Europe, many living organisms are dependent on or directly associated with deadwood habitats, including at least:

- 1,500 fungi species,
- 1,400 beetle species,
- 500 fly and mosquito species
- and numerous species of wild bees, ants, snails, amphibians, birds and even mammals.

The Deadwood Station showcases this complexity by displaying two real beech logs in horizontal and vertical positions to mimic the stages of natural decomposition. There are also numerous interactive elements that present the organisms living on, in and around deadwood. Large educational panels placed between and behind the logs provide additional information about the deadwood habitats and their inhabitants.

Once again, the Alpine longhorn beetle appears as a flagship species, but now embedded in a broader community of organisms that share and shape the deadwood ecosystem.

OUTDOOR EDUCATION: INSPIRING, PLAYFUL AND SOMETIMES WEATHER-WORN

As Alpenzoo has limited indoor areas, almost all its educational installations are located outdoors. This creates weather-related challenges: snow, rain, intense sunlight and temperature fluctuations. Combined with the frequent and often, let's say, enthusiastic use by visitors, signs of wear and tear are inevitable.

Within four years, the giant beetle model began to splinter, and parts of the antennae broke. The replacement model is now crafted from robust robinia wood, with simplified, more durable antennae. Similarly, the original standing beech log used at the Deadwood Station deteriorated faster than expected under alpine weather conditions and had to be replaced with an artificial, concrete-based replica in summer 2025. All reusable models, signs and components were carefully integrated into this new artificial tree.

A MEANINGFUL CONTRIBUTION TO ALPINE CONSERVATION

Although breeding success for the Alpine longhorn beetle at the station was lower than initially hoped, the educational impact has been undeniable. Many visitors leave with a new appreciation for deadwood and forest ecology. For children, climbing on a giant blue alpine longhorn beetle often becomes the highlight of their zoo visit.

By making alpine insects visible, tangible and even lovable, Alpenzoo contributes to broader conservation goals. Awareness is the first step towards action, and the installations help to bridge the gap between scientific understanding and public engagement.

As the Beetle and Deadwood Stations show, even the smallest creatures can tell the biggest ecological stories. And sometimes it takes nothing more than a carefully placed log and a giant blue beetle to reveal the diversity that decay brings to life.

REFERENCES

- Nature Conservation Association of Lower Austria (2010). *Action Plan for the Alpine Longhorn Beetle (Rosalia alpina) in Austria*.
- Böhm, C. (2021). Annual Report 2020/2021. Research and Teaching Institute, Alpenzoo Innsbruck



LET THERE BE DARKNESS

IN A SCOOP FOR THE CITY OF AMSTERDAM, ARTIS ZOO HAS BEEN OFFICIALLY RECOGNISED AS THE FIRST ZOO TO PROTECT NOCTURNAL DARKNESS

Savitri Groag, Sustainability Coordinator and Milo Grootjen, Head of the Planetarium, both Artis Zoo

In a city famed for its glittering nightlife, Amsterdam (the Netherlands) now hosts something rare: a protected area of darkness. ARTIS Zoo has become the first zoo in the world – and the first site in the centre of a European capital – to receive the Urban Night Sky Place certification from DarkSky International, marking a milestone in recognising darkness as essential for urban nature.

A DARK OASIS IN A LUMINOUS CITY

Seen from above, Amsterdam resembles a web of golden streets and floodlit façades. Yet in its historic centre lies one noticeably dim patch: ARTIS Zoo. The 185-year-old park is now recognised as a haven where night still falls as nature intended. For wildlife in and around the zoo, darkness is not a luxury – it is a biological necessity.

'ARTIS demonstrates that even in one of Europe's brightest capitals, nocturnal darkness can be preserved,' says Dan Oakley of DarkSky International. 'Protecting the

night sky in such an urban location – and communicating its importance to the public – is of tremendous value.'

PROTECTING RHYTHMS, RESTORING REST

The certification acknowledges years of work to review and replace lights across ARTIS's 30-acre grounds. Lighting plans were reconfigured, fixtures dimmed or removed and essential lights shielded to prevent upward spill – all to restore structural darkness in areas where plants live and animals rest or forage.

This work matters because the Netherlands is among the most light-polluted countries in the world. Artificial light disrupts circadian rhythms, interferes with animal migration and alters behaviour. By cultivating darkness, ARTIS Zoo is supporting the wellbeing of species from bats navigating by starlight to amphibians whose breeding depends on reliable night cues.

'The last piece of truly untouched nature is right above your head,' says Milo Grootjen, astronomer and Head

of the ARTIS Planetarium. 'Because of light pollution, many people have never seen the Milky Way. You miss something profound when you lose that view.'

Grootjen continues; 'Darkness restores the natural rhythms that all life depends on. Every animal needs night to rest – not only species in ARTIS, but also city wildlife that comes here seeking calm and darkness. Our own bodies also rely on a day-night cycle, and constant light from street lamps or screens can disrupt that. So protecting darkness is essential for animals, for nature and for us.'

'Darkness is not the absence of something,' adds Savitri Groag, Sustainability Coordinator at ARTIS. 'It is a natural condition that plants, animals and humans rely on. By switching off the lights, we return to the rhythm that life evolved with.'

A MODEL FOR URBAN ZOOS

Zoos in dense city centres often face constant illumination. With this certificate, ARTIS shows that urban institutions can meaningfully contribute to dark-sky protection. Its location – surrounded by residential areas, bars and clubs – makes the certification particularly significant. As an Urban Night Sky Place, ARTIS will continue monitoring light levels and educating visitors on the ecological importance of darkness.

INVITING THE PUBLIC TO REDISCOVER THE NIGHT

Since December 2025, ARTIS Zoo opens its gates after sunset for unique night-time experiences. Visitor numbers are limited to ensure tranquillity, giving guests the chance to wander through the unlit park, listen to nocturnal sounds and observe biodiversity as it becomes active. In the ARTIS Planetarium, visitors can reconnect with a starry sky that they won't be able to see outside because of the city's glow.

As Grootjen explains, 'These evenings aim to show that darkness is not something to fear, but something to protect.' Groag adds: 'For ARTIS, the certification is a beginning rather than an endpoint. If more dark-sky oases emerge in cities, ecological rhythms can be restored, and millions of people can rediscover the beauty of natural night. Darkness belongs in the city just as much as light. We're proud to show that protecting it is possible – and profoundly rewarding.'



DINO DON'S SUPPORTS COP30

COP30 was the latest UN climate summit this November. It brought together world leaders, scientists, and activists to accelerate climate action. Key discussions included funding forest preservation and phasing out fossil fuels.

Dino Don, Inc. supports COP30 with exhibits focusing on extinction and conservation education to help zoo visitors make educated decisions that will impact our future. Healing our world begins with individual action, no matter how big or small.

TESTIMONIALS FROM EXPERTS



"Dinodon does a great job of introducing additional content with its exhibitions...Without a doubt, they are contributing to the development of the zoos of the future."

-Agustín López Goya, Europe Conservation Manager, Parques Reunidos



"Zoos bring people together. Worldwide. The COP30 meeting brings experts together from all over the world...If our visitors understand the needs of wildlife and the environment, then these millions, our audience will make a difference."

- Endre Sós, DVM, CEO, Budapest Zoo (Hungary)



"As a leader of an organization dedicated to conservation, I believe that only through a global awareness of these needs can we aspire to profound and lasting environmental change. Let us unite in this common purpose..."

-Pedro Lavia, Founder & President, Zoomarine (Portugal)



"With more than 1,000,000 species threatened by extinction and facing unprecedented man-made global warming, it is imperative that the world comes together to find solutions...We owe it to the animals. We owe it to the planet!"

-Mads Frost Bertelsen, Zoological Director, Copenhagen Zoo (Denmark)



"By aligning with COP30's global climate and conservation goals, zoos can strengthen partnerships, share expertise, and promote sustainable solutions for species survival."

-Eric Bairrão Ruivo, Conservationist, SOS Faune Sauvage

Learn more at <https://unfccc.int/cop30>

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