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ZOOQUARIA

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CLOSE TO THE EDGE

What can we do to reverse the amphibian crisis?

LINKING UP FOR THE LYNX

WORKING TOGETHER TO PROTECT THE WILD LYNX POPULATION

WETLANDS RESCUE

EAZA LAUNCHES ITS NEW CONSERVATION CAMPAIGN

KEY: a quick guide to frequently used acronyms

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

Zooquaria

EDITORIAL BOARD:
Executive Director Myfanwy Griffith (myfanwy.griffith@eaza.net)
Managing Editor Lisanne Schoonebeek (zooquaria@eaza.net)
Editor Joanna Swinnerton
Editorial Staff Sandrine Camus, Raymond van der Meer, Lauren Florisson
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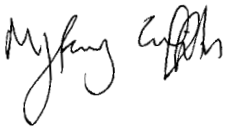
FROM THE DIRECTOR'S CHAIR

I am delighted that this issue of *Zooquaria* is packed with more inspiration and evidence of progress than usual – even if this means I needed to shorten my section so that we could fit it all in! The autumn conference season provided an excellent opportunity to connect with colleagues and challenge ourselves with varied content. Łódź Zoo had a very high bar to clear after the success of the 2024 EAZA Annual Conference in Leipzig. The article on pages 10–11 shows how they gracefully jumped to the challenge with wonderful hosting and an inclusive atmosphere.

More than 1,000 people attended the EAZA Annual Conference, evidencing the desire and commitment to be involved in EAZA activities. This *Zooquaria* shares a range of other ways you can become involved; from becoming an EEP Coordinator or Veterinary Advisor to participating in EAZA Conservation Campaigns or joining with partners such as the Linking Lynx Project or Amphibian Ark. The successes of EAZA and the ability to meet our vision of progressive zoos and aquariums saving species together with you truly relies on the 'with you' aspect. We are unstoppable when every Member is involved in some way at some level.

Such commitment and involvement are evidenced by our Lifetime Achievement Award winners mentioned below. Each has given much in their own distinct way to advance EAZA, and they provide inspiration for all to emulate. It is with sadness that I also mention the passing of another Lifetime Achievement Award winner, Professor Gunther Nogge. I never had the privilege to meet him in person; however, his importance – and the legacy he leaves – to EAZA and beyond is undeniable. You can read more about his life and leadership on page 9.



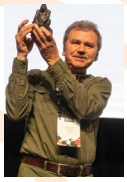
Myfanwy Griffith
Executive Director, EAZA

2025 EAZA LIFETIME ACHIEVEMENT AWARDS

At the EAZA Annual Conference in September, Christoph Schwitzer handed over four Lifetime Achievement Awards to honour key figures whose legacy will continue to inspire us for many years. Congratulations and our sincere thanks to the outstanding recipients for their invaluable involvement in EAZA and dedication to species conservation!

■ Senior Curator of Invertebrates and Fish at ZSL (UK), **Paul Pearce-Kelly** is an ambassador for zoos and aquariums, and for the recovery of threatened species through conservation breeding.

His commitment to invertebrate conservation has helped to save species from extinction. He is a global leader in this field, working with numerous IUCN Specialist Groups, and inspiring the next generation of conservationists through the engaging invertebrate exhibits he has designed.



■ Director of Łódź Zoo, Curator of Birds and Zoological Manager at Warsaw and Zamość Zoos (all Poland), **Ryszard Topola** has dedicated more than 45 years of his life to Polish zoos, for which he has also created and edited the Polish Zoo and Aquarium Yearbook.

Understanding the value of working together across borders, he was a member of the EAZA Council from 1998 to 2009 and EAZA's Treasurer from 2005 to 2009. Although he retired in 2021, Ryszard continues to provide his expertise for the EEP coordination and monitoring of many bird species.

■ Science and Conservation Director at Beauval Zoo (France), **Eric Bairrão Ruivo** has always been a big believer in EAZA values. He's held numerous EAZA roles over the years, from EEP Coordinator and Callitrichid TAG Chair to Conservation Committee Chair and EAZA Secretary.

Eric was a driving force behind the development of the first EAZA Conservation Standards, as well as the development of our Conservation Campaign structure. He's also an active accreditation screener and a fierce advocate for EAZA Standards.

■ Currently Director at Werribee Open Range Zoo (Australia), **Mark Pilgrim** is no stranger to the EAZA community. During his 33 years at Chester Zoo (UK) – where he arrived as a bird keeper in 1988 and left as CEO in 2021 – Mark has occupied many key EAZA roles, including Council member, EEP Committee Chair, Technical Assistance Chair and latterly Vice Chair of EAZA. He was instrumental in the development of the MoU that resulted in the successful translocation of Eastern black rhinos (*Diceros bicornis michaeli*) from the EEP to Rwanda.

NOTICEBOARD

EAZA MEMBERSHIP DECISIONS

A very warm welcome to new Members and congratulations to those progressing to Full Membership. Thank you to the zoos, aquariums and corporate organisations for their engagement with the process, and for all the screeners who provided their valuable time and expertise. EAZA Council approved the following membership decisions during their September meeting:

New Members – Temporary Membership
- Hof van Eckberge, the Netherlands
- Malmö Aquarium, Sweden

Candidate for Membership to Temporary Membership
- Almaty Zoo, Kazakhstan

Temporary Membership to Full Membership
- Dubai Safari Park, UAE
- Jimmy's Farm & Wildlife Park, UK
- The Green Planet, UAE
- Brașov Zoo, Romania
- Osijek Zoo, Croatia

Terminate/End Candidate for Membership contract
- Sarajevo Zoo, Bosnia and Herzegovina

Deny Membership
- Dierentuin Hoenderdaell, the Netherlands

Existing Member – Temporary Membership
- Howletts Wild Animal Park, UK

New Corporate Members
- accesso Technology Group, UK
- Attractions.io, UK
- Granum Animal Nutrition, Poland
- Rewild Safaris, USA
- Visit Group, Sweden

NEW EAZA COMMITTEE CHAIRS

EAZA welcomes Anete Bilzēna (Riga Zoo, Latvia), as the new Communications Committee Chair. Anete is also the elected Council member for Latvia.

André Stadler (Alpenzoo Innsbruck, Austria), was approved by EAZA Council to continue as Technical Assistance Committee Chair for another term.

Kirsten Pullen (Chester Zoo, UK), was approved by EAZA Council as the new Research Committee Chair. Both André and Kirsten will be put forward for final approval by the AGM in April 2026.

We thank Sanna Hellström (Helsinki Zoo, Finland) and Zjef Pereboom (KMDA, Belgium) for their dedicated work chairing the Communications Committee and Research Committee respectively over the past terms.

SAVE THE DATES FOR EAZA EVENTS 2026

16–19 March 2026, EAZA Animal Welfare Forum, Antwerp Zoo, Belgium
The deadline for abstract submission is 15 December.

For AWF26, we particularly welcome contributions that connect science with practice, offering insights, case studies and innovative solutions that can be applied in daily zoo and aquarium work. Please submit your abstract to Marina Salas (marina.salas@kmda.org).

- **13–17 April 2026, EAZA Directors' Days,** Safaripark Beekse Bergen, the Netherlands

- **19–22 May 2026, EAZA Conservation Forum**, Opel-Zoo, Germany

- **29 September–3 October 2026, EAZA Annual Conference,** Muséum national d'Histoire naturelle, France

Find out more on the Events page of the EAZA website (www.eaza.net/events). We hope to see you there.

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NEW ARRIVALS

NEW VOICES IN THE AVIARIES

GARRULAX BICOLOR
© L. DIOGO, AMIENS ZOO

AT AMIENS ZOO (France), 2025 has been a year of songbirds; the air is filled with new life – and new hope. The zoo is celebrating the hatching of several rare songbirds: the dazzling Bali myna (*Leucopsar rothschildi*), the talkative hill myna (*Gracula religiosa intermedia*) and the striking Sumatran laughingthrush (*Garrulax bicolor*).

Each of these species tells a story of fragility and resilience, and together they represent a remarkable milestone in Amiens Zoo's growing role in bird conservation.

Even more impressive, the breeding pairs for all three species were established only at the start of 2025. Within months, the first eggs had hatched – a testament to the adaptability of the birds and to the expertise of the zoo's avian keepers, who crafted precise conditions for courtship, nesting and care. This is a notable success for Amiens Zoo, as only three EAZA institutions achieved hill myna breeding in 2025.

The season's first arrivals came on 23 May, when two Critically Endangered Bali mynas hatched: a male and a female, whose pure white plumage hinted at the brilliance they will display as adults, once their distinctive blue eye patches appear. A few weeks later, on 15 June, a hill myna chick emerged – a lively female who quickly became a favourite among visitors, charming everyone with her playful calls.

These successes were followed on 15 August by a third Bali myna chick, further strengthening the *ex situ* population of one of the world's most threatened songbirds.

Between these happy moments, there was also a poignant reminder of the challenges involved in breeding delicate passerines. On 13 July, a Sumatran laughingthrush was also born but, sadly, did not survive beyond 22 August. As unfortunate as this was, each breeding attempt offers invaluable lessons that help to refine husbandry techniques and improve future outcomes.

Today, as visitors wander through the aviaries, they might hear the first calls of the young hill myna or glimpse the bright plumage of the Bali mynas – small but powerful symbols of what is at stake for global biodiversity, and of the vital role modern zoos play in keeping these songs alive for generations to come.

RARE INDIAN RHINO BORN IN PLANCKENDAEL ZOO

PLANCKENDAEL ZOO (Belgium) is proud to announce the birth of an Indian rhinoceros (*Rhinoceros unicornis*). The delivery went smoothly, and the birth is a valuable contribution to the EEP for this threatened species.

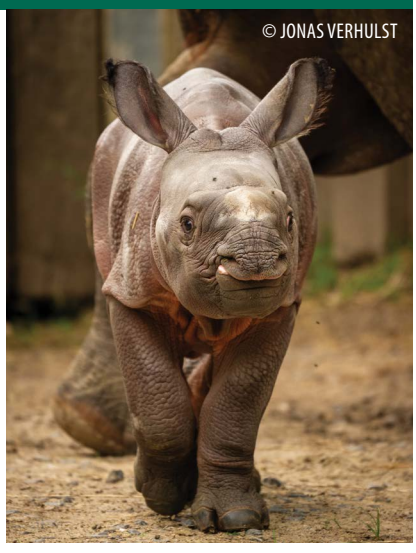
The mother, named Karamat, gave birth in the early morning. Within an hour, the calf was standing and taking a few steps, and two hours later it was already nursing. 'This mini version captured our hearts from the very first moment,' said her keeper, Maaike. A 'mini version' it may be, but it's no lightweight: the newborn rhino weighs around 60 kg.

The calf may not yet have a horn, but the typical skin folds are already clearly visible. These folds resemble armour plates but are surprisingly flexible. Beneath the thick skin lies soft connective tissue, allowing the animal to move smoothly. In the first days, calves have a pinkish hue before turning grey-brown. The horn, composed of keratin, grows about 7 cm per year, reaching an average length of 60 cm in adulthood.

Reproduction in rhinos is far from simple. Courtship can involve hours of chasing. Mating itself can last up to an hour, accompanied by whistling sounds and copious urination. Pregnancy then lasts an impressive 16 months — about 480 days. Indian rhinos are fertile for only two to three days every six weeks, and there are typically three to five years between births. As a result, the International Studbook of the Indian rhino grows at a very slow pace.

For 15-year-old Karamat, this is her third calf. In 2015 she gave birth to Qabid, followed by Vaiana in 2020. Both are part of the EEP and are contributing in turn to the species' survival.

The Indian rhinoceros is classified as Vulnerable on the IUCN Red List. Of the roughly 2,800 animals in the wild in India and Nepal, about 70% live in a single national park: Kaziranga in India.



© JONAS VERHULST

A forest fire or flood could therefore be catastrophic for the population. Above all, poachers continue to threaten the rhinos for their horns. 'Every healthy calf contributes to the conservation of this unique species,' says mammal curator Sarah Lafaut. 'We are therefore incredibly happy with this new addition.'

PHOTOS: ALEXANDRE BLANCHON, ESPACE ZOOLOGIQUE

SUN BEAR BORN AT ZOO SAINT-MARTIN-LA-PLAINE

ZOO SAINT-MARTIN-LA-PLAINE (France) is delighted to announce the birth of Tiga, a female sun bear (*Helarctos malayanus*), on 3 February 2025. This marks the first sun bear birth in a French zoological institution in 25 years – a milestone for both the park and the EEP.

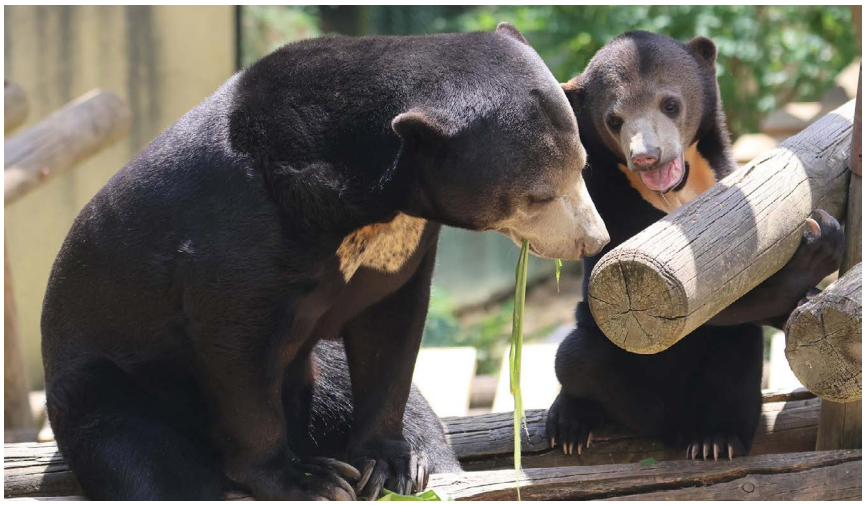
From the very beginning, the cub, carefully protected by her mother Talli, was kept away from the public and from her father, Saï, to ensure that she could develop in a calm environment. Supported by expert keepers and veterinarians working within the EEP, the cub thrived. Her existence was revealed to the public in May. At the time of writing (August 2025), after several weeks of introductions with Saï, the family has been reunited and the three bears now live together peacefully.

Talli is a six-year-old bear born at Burgers' Zoo in the Netherlands. She arrived at Saint-Martin-la-Plaine in February 2024 and quickly bonded with Saï, the male bear.

Saï's story is unusual: born in the wild, he was captured as a cub by someone attempting to sell him to a bile farm. At just five months old, he was confiscated on a train in Cambodia and entrusted by the Cambodian authorities to the NGO Free The Bears, where he grew up in one of their sanctuaries.

In 2009, the EEP asked Saint-Martin-la-Plaine to help address a shortage of breeding males in the sun bear population held in European zoos. At the time, the zoo kept a 10-year-old female who had been living alone after the death of her parents. In partnership with Free The Bears, the zoo arranged the introduction of a male – which is how Saï came to Zoo Saint-Martin-la-Plaine. With a father born in the wild, Tiga carries very valuable genetic heritage for the EEP population.

The sun bear is listed as Vulnerable by the IUCN; wild populations are estimated to have declined by around 40% over the past 30 years. In this context, every *ex situ* birth is vital not only for maintaining genetic diversity within managed breeding programmes, but also for raising public awareness about conservation challenges. Through this birth, Zoo Saint-Martin-la-Plaine reaffirms its commitment to the responsible management of endangered species.



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Professor Gunther Nogge (1942–2025)

Theo B Pagel, CEO, Cologne Zoo

It is with great sadness that we note the passing of Gunther Nogge, former director of Cologne Zoo (Germany) and a pioneering figure in the European zoo community. Born in Cologne in 1942, Gunther Nogge devoted his life to advancing zoological science, animal welfare and species conservation.

Christoph Schwitzer (EAZA Chair and director of Dublin Zoo, Ireland) says: 'With the sad passing of Professor Gunther Nogge, the international zoo community has lost one of its true giants. As one of the founding fathers of EAZA and its EEPs, and as the visionary who transformed Cologne Zoo into the forward-looking institution it is today, he shaped modern zoo management in Europe and beyond and set standards for zoo-based conservation, science and animal welfare. For me personally, he was not only one of my PhD supervisors and mentors, but also my "zoological dad" and a lifelong role model. I learned a lot from him, from how to distinguish between the different species of flamingo to the longevity of a maned wolf, and I am proud to follow in his footsteps as Chair of EAZA.'

Gunther Nogge started his career working as an assistant animal keeper at Cologne Zoo alongside taking his degree at the University of Bonn (Germany). From 1969 to 1973 he worked in Afghanistan as a lecturer at Kabul University and as scientific director at the local zoo. He then returned to the University of Bonn from 1973 to 1981 to work in the field of parasitology. He qualified there as a professor in 1978 with a thesis on tsetse flies, for which he received the prestigious Insect Physiology Prize. He continued working as a professor in Bonn until he moved to the University of Cologne, where he played an active role in both research and academia over the years.

This combination of science and well-informed zoo practice enabled his childhood dream to come true when, on 15 July 1981, he became director of Cologne Zoo, a position he occupied for 25 years. Under his pioneering leadership, the 'Friends of Cologne Zoo Association' was founded in 1982. Among the notable additions to the zoo during this period were the jungle house for great apes, the enclosures for leopards, the tropical house and the elephant park, each introducing new standards for the care and keeping of these animals. Increasingly, Cologne Zoo began to support species conservation projects outside the boundaries of the zoo. Some of his research work is being continued by Cologne Zoo to this day.

Gunther's contributions went much further than Cologne, and his vision impacted the zoo community globally. In 1985, he co-founded the European Endangered Species Programme (now EAZA Ex situ Programme/EEP), establishing species conservation programmes and heralding a new era in the history and management of European zoos.

Gunther chaired the EEP Committee from 1987 to 1994, was EAZA Chair from 1998 to 2000 and received the EAZA Award for Professional Excellence (now called Lifetime Achievement Award) in 2004. From 1993 to 1995, as president of the International Union of Directors of Zoological Gardens (IUDZG, later World Association of Zoos and Aquariums/WAZA) he also provided important impetus at a global scale for reorganisation and securing the future. For his commitment to EAZA and services to the zoo world itself, he received the Heini Hediger Award from WAZA in 2007, the highest award in the zoo community.

As his successor, I began my career at Cologne Zoo in 1991 as a curator under his supervision. During my time working with him, he always gave me free rein and I learned a lot from him. Gunther was an authority on zoo biology and one of the most progressive zoo directors of his time. I believe that the zoo world, and Cologne Zoo in particular, owes him a great deal, as do I personally.

He has left a significant and influential mark internationally in every dimension of zoo work. His legacy also lives on via his numerous articles and books. Anyone who has ever had the privilege of hearing one of his lectures will no doubt remember his intense and profound presence.

Our deepest sympathy goes to his wife, relatives, colleagues and friends.

Hats off to Łódź Zoo

THE LATEST EDITION OF THE MILESTONE EVENT IN THE ZOOLOGICAL COMMUNITY WAS AN OUTSTANDING SUCCESS

Sandrine Camus, Communications Coordinator, EAZA Executive Office

From 9–13 September, the EAZA Annual Conference – beautifully hosted in Łódź (Poland) – brought together 1,008 delegates from 54 countries and 382 institutions. Professionals from zoos, aquariums and partner organisations worldwide shared expertise, celebrated successes and charted new paths for species conservation.

WELCOME TO ŁÓDŹ

After an EAZA Academy course on animal training on Tuesday morning and a first meeting for TAG Chairs and EEP Coordinators in the afternoon, the icebreaker held outside the famous Orientarium kicked off the festivities. The relaxed mood was a reminder that these meetings are not just about data and strategic planning, but also about community, bringing together people united by their passion for protecting wildlife.

International headlines regarding Russian drone activity over Poland on Wednesday morning had us worried for a brief moment, but the fear shortly disappeared. The organising team reassured attendees about their safety and the rest of the week continued without a hitch.

BUILDING MOMENTUM AND LOOKING AHEAD

On Wednesday, Christoph Schwitzer, director of Dublin Zoo (Ireland) and new EAZA Chair, officially opened the conference, introducing himself and the challenges that our community faces ahead of the next EAZA strategy. With a quote from Dumbledore, he reminded us that collaboration is the only way to succeed in our common goals.

After Adam Pustelnik, vice president of the City of Łódź, underscored how zoos can inspire urban communities and act as centres of education and sustainability, Łódź Zoo Director of Development Michał Gołędowski presented the zoo's recent transformation into a leader in conservation, research and education. From revamped enclosures to new veterinary facilities, this institution now stands as a model for modern zoo practice.

EAZA Executive Director Myfanwy Griffith highlighted achievements from the past year before focusing on future projects and encouraging the delegates to take part in the various roles available in our Committees and TAGs.

Keynote speaker Carl Jones, chief scientist at Durrell Wildlife Conservation Trust (UK), reflected on the extraordinary influence of Gerald Durrell's vision, which turned a small zoo on the island of Jersey into a pioneering force for species recovery. He reminded the audience that more than 10 species would not have survived without their efforts – in collaboration with many partners – and that conservation requires both scientific expertise and long-term commitment.

FROM VIETNAM TO WORLDWIDE EFFORTS

In the afternoon, the EAZA Conservation Campaigns were in the spotlight. The Vietnamazing team presented the substantial results achieved in the past two years, including €500,000 collected, 168 participating institutions and one frog species discovery. Although the campaign will officially close at the end of 2025, the work will continue through the new Vietnamazing Conservation Network.

The second half of the plenary was dedicated to wetlands – the focus of the next EAZA Campaign and an essential ecosystem supporting 40% of the world's biodiversity. Members of the Wetlands for Life team explained why and how zoos and aquariums can get involved in the campaign. Then keynote speaker Alex Hughes from the Wildfowl & Wetlands Trust (UK) emphasised how storytelling can make conservation campaigns resonate with wider audiences, turning challenges into compelling narratives that move people to act.

Workshops and parallel meetings ran throughout the conference. The agenda was packed with specialised

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sessions ranging from conservation education and animal training to species programme updates and EU legislation for zoos. The balance between formal sessions and informal networking opportunities gave everyone a chance to learn and contribute at multiple levels.

GOING WILD

After an immersion in Łódź Zoo's wildlife on Thursday, the Rewilding Plenary tackled one of the most ambitious challenges in conservation: restoring species and ecosystems in the wild. While we may not all agree on its definition, all the speakers were unanimous: EAZA zoos and aquariums have the expertise and the responsibility to act now!

Radosław Ratajszczak (Poznań Zoo, Poland) outlined the history of European rewilding, while Gerardo García (Chester Zoo, UK) highlighted the wealth of opportunities – aligned with the IUCN guidelines – that are available to us to support species across all taxa. Daniel Klich (European Bison Conservation Friends Society and Warsaw University of Life Science, Poland) emphasised the continued importance of managing European bison (*Bison bonasus*) populations even after successful reintroductions. Barbora Dobiášová (Prague Zoo, Czechia) shared ongoing strategies for the Przewalski's horse (*Equus ferus przewalskii*) recovery, rescued from extinction but still under pressure from hybridisation and climate change. Tim Schikora (Schwerin Zoo, Germany) reported on the giant otter (*Pteronura brasiliensis*) reintroduction in Argentina, relying on years of collaborative *ex situ* work – breeding, research and careful planning. Finally, Andrew Tilker from Re:wild reminded us that restoring ecosystems requires addressing all components, from protected areas to coordinated standards.

BRIDGING THE GAP BETWEEN BEHIND-THE-SCENES SCIENCE AND PUBLIC AWARENESS

On Saturday, the Exhibit Design Plenary focused on innovative habitats for large and small species. Mark Pilgrim (Werribee Open Range Zoo, Australia) explained the philosophy behind their expansive new 21-hectare elephant habitat, which aims to replicate natural behaviour while offering immersive visitor experiences. Anaïs Tritto (Mandai Nature, Singapore) presented the Bird Paradise project, showing how careful use of natural landscapes can shape exhibits that feel organic and educational. Jakub Kordas (Wrocław Zoo, Poland) emphasised storytelling as a central design tool, urging the shift from static 'fish in glass' displays to immersive learning environments. Beatriz Domínguez described how Oceanogràfic Valencia (Spain) transformed artificial ponds into 'living lakes', enhancing conservation value and community engagement. Fabian Schmidt showcased the dwarf tortoise breeding station at Basel Zoo (Switzerland) where visitors directly observe conservation in action. Using the example of Aralandia, Arne Lawrenz (Wuppertal Zoo, Germany) reasserted the session's overall message that thoughtful exhibit design goes beyond what you see; it plays a vital role in impactful conservation, innovative research and public awareness.

A LIFELONG COMMITMENT

Before hitting the dance floor at the gala dinner, we concluded an inspiring week by honouring key figures whose legacy will continue to inspire us for many years. For the 2025 edition, Christoph Schwitzer handed over four Lifetime Achievement Awards! Congratulations and our sincere thanks to Paul Pearce-Kelly (ZSL, UK), Ryszard Topola (Łódź Zoo), Eric Bairrão Ruivo (Beauval Zoo, France) and Mark Pilgrim (Werribee Open Range Zoo) for their invaluable involvement in EAZA and dedication to species conservation (see page 4).

STRONGER TOGETHER

Throughout the conference, the phrase 'Stronger together' kept reappearing, and it served as a fitting summary of EAZA's philosophy. Whether through our cooperative *ex situ* programmes, coordinated campaigns or shared training, EAZA thrives on the collective strength. Each presentation emphasised successes that wouldn't have been possible without collaborative efforts, and reinforced that no single institution can save species alone, but together EAZA zoos and aquariums hold tremendous power.

We hope that delegates came away with renewed energy, practical tools and fresh ideas, but most importantly with a sense of belonging to a community that is creative, resilient and determined to make a difference.

Once again, we thank the organising team from Łódź Zoo, the PCO, the exhibitors and the sponsors for making this event not only possible but also a real success. We can't wait, to see you in Paris Zoo (France) for the next edition from 29 September to 3 October 2026!

Ninety years and beyond

THE 80TH WAZA ANNUAL CONFERENCE MARKED NINE DECADES OF GLOBAL COLLABORATION AND COLLECTIVE IMPACT FOR WILDLIFE AND PEOPLE

Rosa Pons, Head of Communications, WAZA

The World Association of Zoos and Aquariums (WAZA) celebrated a remarkable milestone this year – its 90th anniversary – with a landmark edition of its Annual Conference. Held in Cali (Colombia) and online from 26–30 October 2025, the 80th WAZA Annual Conference brought together conservation leaders and zoo and aquarium professionals from all over the world with the theme '90 Years and Beyond: Uniting for a Thriving Planet'.

Hosted by the Cali Zoological Foundation, the hybrid event captured the spirit of connection and collaboration that has defined WAZA for nine decades. 'Ninety years on, WAZA continues to bring together a global community united by purpose,' said WAZA Chief Executive Officer Martín Zordan. 'This year's conference in Colombia celebrated not only our shared legacy, but also our collective determination to build a future in which biodiversity and human wellbeing thrive together.' Participants experienced an inspiring programme of keynotes, panels and celebrations that reflected both the diversity and common purpose of WAZA's members.

A LANDMARK ANNIVERSARY

The anniversary theme resonated throughout the five-day event. Attendees traced the journey from the early zoo movement to today's era of science-based conservation and welfare, exploring how to shape the future with renewed purpose and unity.

Colombia, with its extraordinary ecological and cultural richness, offered a fitting backdrop. Attendees on-site immersed themselves in local heritage and biodiversity, while participants from around the world joined online. More than 200 participants registered for the event – 85 of them virtually – making this

WELCOMING THE NEW WAZA COUNCIL 2025–2027

During the Annual General Assembly, WAZA welcomed a new Council for the 2025–2027 term, bringing together representatives from across the world and reflecting WAZA's diverse global membership.

David Field, CEO of the Royal Zoological Society of Scotland (RZSS, UK), was elected president, and **Cynthia Whitbred-Spanoulis**, president and CEO of the Virginia Aquarium and Marine Science Center (USA), as vice president.

The new Council brings together leaders from institutions across all regions – **Lisa Peterson** (Houston Zoo, USA), **Kevin Mills** (South Carolina Aquarium, USA), **Dolf DeJong** (Toronto Zoo, Canada), **Simon Dowell** (Chester Zoo, UK), **André Stadler** (Alpenzoo Innsbruck, Austria), **Sanna Hellström** (Helsinki Zoo, Finland), **Sonja Luz** (Mandai Wildlife Group, Singapore), **Sally Sherwen** (Melbourne Zoo, Australia), and **Eric Tsao** (Taipei Zoo, Taiwan) – alongside representatives of WAZA's regional associations: **Craig Hoover** (Association of Zoos and Aquariums/AZA), **Myfanwy Griffith** (EAZA), **Alexandra Guerra** (Latin American Zoo and Aquarium Association/ALPZA), and **Nicola Craddock** (Zoo and Aquarium Association Australasia/ZAA). **Kira Mileham** (IUCN SSC) will continue to hold an observer seat on the Council alongside **Sarah Thomas**, incoming president of the International Zoo Educators Association (IZE).

WAZA expressed its deep appreciation to **Karen Fifield**, outgoing president and chief executive of Te Nukuao Wellington Zoo (New Zealand), for her exemplary leadership over the past two years. Her closing message – 'Our work is never done, and we need to do it together' – captured the collaborative spirit that defines WAZA. Fifield will continue to serve on the WAZA Council as a non-voting member in her capacity as immediate past president.

Outgoing Council members **Clément Lanthier** (Calgary Zoo, Canada), **Alejandro Grajal** (Woodland Park Zoo, USA), **Brandie Smith** (Smithsonian's National Zoo and Conservation Biology Institute, USA), **Jamie Christon** (Chester Zoo, UK), **Elaine Bensted** (Zoos South Australia, Australia), **Judy Mann-Lang** (Two Oceans Aquarium, South Africa) and **Peggy Sloan** (Seattle Aquarium, USA) were also warmly thanked for their dedicated service.

WAZA's first hybrid conference and a true celebration of global inclusion.

INSPIRING KEYNOTES

Across its programme, the conference featured three keynote sessions that reflected the diversity of perspectives driving today's global conservation dialogue.

Day 1 – Ancient wisdom for a modern world

Renowned anthropologist, author and explorer Wade Davis, opened the conference. He took delegates on a journey through cultures and ecosystems across the planet, from the Amazon to the Himalayas, reminding us with the following words that every language and tradition embodies unique ecological wisdom: 'A language is not just grammar or vocabulary; it is a flash of the human spirit, the vehicle through which the soul of a culture comes into the material world. Every language is an old growth forest of the mind, a watershed of thought, an ecosystem of social and spiritual possibilities.' This perspective echoed throughout his keynote, calling for renewed appreciation of cultural diversity as a cornerstone of sustainability.

Day 2 – Collaborative conservation in Colombia

Rosamira Guillén (Proyecto Titi, Colombia) and Andrés Link (Proyecto Primates, Colombia) shared stories from decades of conservation work protecting two of Colombia's most charismatic and endangered primates: the cotton-top tamarin (*Saguinus oedipus*) and the brown spider monkey (*Ateles hybridus*). They emphasised the importance of integrating *in situ* and *ex situ* efforts to protect species and restore landscapes.

Day 3 – Bridging oceans and building alliances

Susana Cárdenas, director of the Punta San Juan programme in Peru, delivered an inspiring talk in which she highlighted 25 years of collaboration between Peruvian universities, zoos and conservation organisations. These partnerships demonstrate how alliances across sectors can generate long-term, evidence-based solutions for marine ecosystems.

HONOURING EXCELLENCE: THE 2025 WAZA AWARDS

The gala dinner was an evening of celebration, reflection, and recognition. Four prestigious awards honoured excellence and innovation across WAZA's global community:

The 2025 WAZA Animal Welfare Award went to **Toronto Zoo (Canada)** for its holistic and evidence-based approach to animal welfare, integrating innovation, compassion and technology.

The 2025 WAZA Conservation Award recognised **Fundación Temaikèn (Argentina)** for its work conserving threatened endemic flora within the Osonunu Reserve, demonstrating the critical role of plant conservation in biodiversity protection.

The 2025 WAZA Environmental Sustainability Award was presented to **Seattle Aquarium (USA)** for its transparent, science-based sustainability strategy, including its Leadership in Energy and Environmental Design Gold-certified Ocean Pavilion facility and active leadership in environmental policy and wildlife protection.

The Heini Hediger Award, WAZA's highest individual honour, was awarded to **Theo B. Pagel (Germany),** CEO of Cologne Zoo, for his outstanding contributions to animal welfare, conservation and education – and his global leadership as WAZA president (2020–2021).

LAUNCHING KEY PUBLICATIONS

A major highlight of the conference was the launch of the WAZA Animal Welfare Strategy 2025. Building on the original 2015 edition, this updated global framework reflects a decade of scientific progress and renewed understanding of animal welfare as a science-driven, holistic discipline.

With contributions from more than 40 experts across the WAZA network, the Strategy provides a roadmap for institutions worldwide to continue advancing the highest standards of care, protection and welfare for animals.

On the same day, WAZA unveiled its 2024 Annual Report, including '90 Years of WAZA in 90 Images', a visual journey through the association's rich history and achievements.

LOOKING AHEAD

The conference concluded with the announcement of the next host: Cologne Zoo (Germany) will welcome delegates to the 81st WAZA Annual Conference from 25–29 October 2026. CEO Theo B. Pagel promised an event that will celebrate heritage, leadership and collective commitment to species conservation.

One of Europe's oldest zoological institutions, Cologne Zoo combines tradition with cutting-edge research, caring for nearly 160 threatened species and contributing to the discovery of over 150 new vertebrate species – a fitting stage for the next chapter in WAZA's story.

A HEARTFELT THANK YOU

As the 80th WAZA Annual Conference drew to a close, there was a palpable sense of pride and optimism. From its beginnings in 1935 to its 90th anniversary in 2025, WAZA has grown into a global alliance of voices, united by a shared mission to protect wildlife and inspire change.

The success of this milestone event was made possible through the dedication of the host, the Cali Zoological Foundation, the outstanding speakers and partners, sponsors and all delegates – in person and online – who made the celebration unforgettable.

Save our wetlands

EAZA'S NEW CONSERVATION CAMPAIGN PLANS TO HARNESS THE EXPERTISE AND COMMITMENT OF ITS MEMBERS TO HELP PROTECT OUR INVALUABLE WETLANDS

NORTH CAVE (UK)
© CRIMSON CARIBOU

Cathy King, Wetlands for Life Campaign Chair, Lagos Zoo

The Wetlands for Life 2026–2027 EAZA Conservation Campaign was officially launched at the EAZA Annual Conference on 10 September 2025. In the 45-minute slot, we highlighted the importance of wetlands conservation and encouraged all EAZA Members to participate in this endeavour. Keynote speaker Alex Hughes (Project Manager of International Engagement, Wildfowl & Wetlands Trust, UK) illustrated how zoos and aquariums can tell compelling stories about the value and protection of wetlands, setting the tone for an inspiring campaign period ahead.

WHY WETLANDS?

The importance of wetlands cannot be overstated. They are critical ecosystems that provide essential ecosystem services, climate-change resilience and human livelihoods: about one in eight people worldwide depends on wetlands for their living.

Wetlands come in many forms; they can be temporary or permanent, and inland or coastal. Natural wetlands include lakes and rivers, underground aquifers, swamps and marshes, wet grasslands, peatlands, oases, estuaries, deltas, tidal flats and coastal areas, including mangroves and even coral reefs. Human-made ponds, rice paddies, reservoirs and saltpans are also wetlands. Although wetlands cover only around 6% of the Earth's land surface, they have an outsized role in supporting biodiversity: 40% of all plant and animal species live and/or breed in wetlands.

Alarmingly, wetlands are the most threatened ecosystems, vanishing three times faster than forests. Globally, 64% of wetlands have disappeared since 1900, with 35% lost just since 1970. More than 25% of all wetland plants and animals are now at risk of extinction. In sum, these declines threaten global biodiversity, the ecosystem services that wetlands provide, and the wellbeing of people who rely on them.

The Ramsar Convention, adopted in 1971 in Iran, is the international agreement that guides the protection and sustainable use of wetlands and their resources. There are currently 2,546 Ramsar Site wetlands on the territories of 172 Convention Contracting Parties across the world, covering more than 2.5 million square kilometres. All European countries are Ramsar signatories, and various other frameworks and policies contribute to the protection of European wetlands. Nevertheless, some European wetlands are among those most threatened.

HARNESSING THE STRENGTHS OF THE EAZA COMMUNITY

Although NGOs and other organisations are involved in wetland conservation, creating wider public awareness and engagement that could result in governments putting critical wetland conservation higher on their agendas has been problematic. In addition to wielding political clout, people can also participate in actions that have direct, positive and tangible effects on local wetlands. Public engagement is, of course, where the EAZA community can make a considerable impact.

wetlands for life
EAZA CONSERVATION CAMPAIGN 2026 - 2027

The Wetlands for Life campaign mobilises EAZA institutions in a shared commitment to wetlands conservation through fundraising, education and practical conservation action. The campaign creates opportunities for all EAZA institutions to get involved, since most have wetland areas, keep wetland species and use water in their facilities. Members can engage at three levels: within their institution, within their community and internationally. Moreover, they can involve diverse departments in their activities, making the campaign process flexible and inclusive for everyone. Participation can be tailored to each institution's capacity and conservation priorities.

CAMPAIGN AMBASSADOR SPECIES

Flamingos are the primary ambassadors for this campaign. They are found in approximately two-thirds of EAZA institutions and are clearly popular with the public (as reflected by their presence in gift shop merchandise and zoo advertisements). Flamingos are symbolic of wetlands; they are fragile and beautiful, yet tough and resilient at the same time. They are also affected by the same issues as other wetland inhabitants.

Additionally, EAZA TAGs have been invited to nominate three wetland-

dependent species to be highlighted during the campaign to showcase the diversity of wetland fauna.

HOW CAN EAZA MEMBERS PARTICIPATE?

Members can register for the campaign at wetlandsforlife.eaza.net. The site offers multiple opportunities for Members to participate in the campaign:

1) Support selected projects

Funding is sought for projects that address a specific issue in each flamingo range region – areas where flamingos occur – that affect entire wetland ecosystems and are globally important. The issues were identified in collaboration with the IUCN SSC Flamingo Specialist Group. Participating zoos and aquariums can choose fundraising activities that fit their resources and audience.

- The Mediterranean and West Africa: water diversion and extraction
- South and East Africa: the need for effective community-based wetland management
- South America: mining
- The Caribbean: rapidly planned coastal tourism infrastructure development
- Asia: water pollution

2) Raise awareness

Although people rely on wetland products such as drinking water, many still don't know much about these fascinating and vital ecosystems. EAZA institutions can promote wetland literacy and appreciation through creative education, outdoor exploration and engaging communication, even without having a wetland on site. Members who want to participate may look for support from schools, universities, NGOs, companies, scientists and especially the institutions that manage local wetlands. Collaboration helps the campaign to reach new audiences.

3) Create, adopt, restore and/or manage a wetland area

EAZA Members are encouraged to create, adopt, restore and/or manage wetlands within and outside their premises. Web pages with information on how to create a wetland will be made available. During the campaign, stories and experiences of participating Members will be collected on the website for inspiration. Please share your projects as they develop, too!

4) Monitor wetland biodiversity

Drawing on the experience of the BIAZA Native Species Working Group in the 'Spotted on Site' Campaign, EAZA Members can involve staff and visitors in using the iNaturalist app to record wetland biodiversity in designated wetland areas, on- or off-site. You can find guidance on how to create accounts and become familiar with the app on the Global Biodiversity Information Facility (GBIF) website. Be ready to monitor wetlands when the EAZA-wide project launches on World Wetlands Day (2 February 2026)! iNaturalist observations contribute to a growing dataset of the GBIF that supports conservation research initiatives across Europe and beyond. If you are creating or restoring a wetland, this is a great opportunity to track how wildlife returns and evolves over time.

5) Save water

EAZA Members can continually strive to use water more efficiently and to store it when it is abundant. The campaign website will provide guidance and examples from zoos that already monitor water use and have introduced solutions such as rainwater harvesting, greywater recycling and other water-saving mechanisms.

6) Improve water quality

Nature-based water filtration methods, such as reed filter beds, can improve water quality and efficiency. Using biodegradable, phosphate-free (cleaning) products that break down harmlessly also benefits water quality. Members are encouraged to share their experiences and tips.

We can't wait to see the creative initiatives that our Members are leading and to showcase these across the EAZA community, inspiring action for wetlands everywhere.

If you have any questions or would like more information, reach out to: wetlands@eaza.net.

CHILEAN FLAMINGOS (*PHOENICOPTERUS CHILENSIS*) © AMERSFOORT ZOO

WETLANDS FOR LIFE CAMPAIGN GOALS

- **Fundraise** for pre-selected conservation activities.
- Increase **public understanding** of the critical importance of wetlands for humans and the world's biodiversity, and the complexities of wetland protection.
- Increase Member involvement in the **creation, restoration and management of wetlands**, on- and off-site.
- Encourage EAZA Members to build lasting **partnerships** with local botanical gardens, research institutes, community clubs and NGOs for wetland conservation.
- **Engage local communities** in wetland conservation through hands-on experiences (e.g. wetland monitoring and clean up) and through opportunities for activism/advocacy.
- Improve **water use and management**, including the reduction of harmful chemicals and the use of nature-based solutions in EAZA Member institutions.

A new guide to field conservation

A NEW EAZA PUBLICATION AIMS TO SUPPORT THE DEVELOPMENT OF FIELD CONSERVATION ACROSS THE EAZA MEMBERSHIP, AND FOCUSES ON THE JOURNEY AS MUCH AS THE DESTINATION

Merel Zimmermann, Field Conservation Coordinator, EAZA Executive Office

The EAZA Conservation Committee recently published 'Your journey towards developing field conservation – a step-by-step inspiration guide' to support EAZA Members in developing and strengthening their involvement in field conservation. It has been created specifically for EAZA Members and reflects the diversity, experience and collaborative spirit of our community. Whether your institution is just starting to explore how it can contribute to field conservation or is looking to expand and strengthen existing efforts, this inspirational guide is a thoughtful and practical resource. The Conservation Committee believes that developing field conservation is a journey rather than a destination, and the guide encourages Members to focus on continuous improvement and learning.

A PRACTICAL RESOURCE

Field conservation has long been at the heart of EAZA's mission, and many Member institutions are already playing an active role in supporting projects around the world. For others who are just beginning their journey, establishing, growing and maintaining field conservation initiatives can seem intimidating. The EAZA Conservation Committee produced this guide as a practical resource for all zoos and aquariums – at any stage of their field conservation journey – to support their efforts in this important area.

Recognising that EAZA Members vary widely in size, resources and experience, the guide acknowledges that there is no one 'right' way to carry out field conservation. Different Members can contribute in different ways based on the institution's context, capacity and ambitions. This can range from providing technical support (staff expertise, research input or community engagement) or financial support (funding, grants or materials) to leading conservation projects. Each contribution can make a meaningful difference when carefully developed and aligned with clear conservation outcomes.

STEPS AND STRATEGIES

The journey can be broken down into a series of clearly defined steps. From initial exploration and internal capacity assessment to project implementation, communication and evaluation, each step is accompanied by simple questions that encourage reflection and planning. Each Member can progress at their own pace through these steps and carefully identify areas where additional support, collaboration or partnerships may be needed.

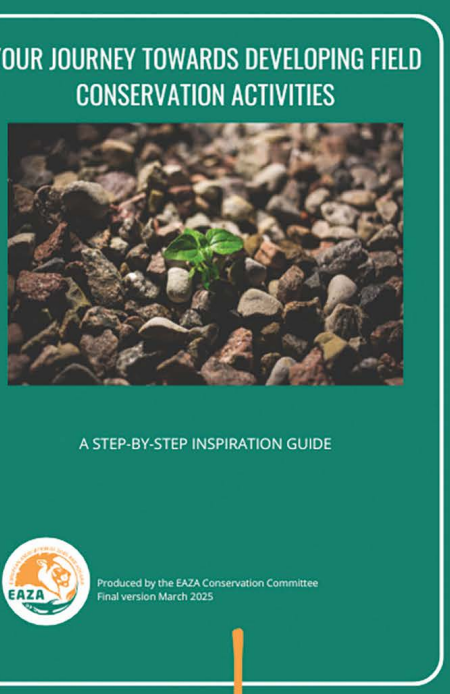
Throughout the document, guidance, practical examples and templates from EAZA Members as well as external resources are provided to help make decisions or illustrate how the different elements of the journey can be applied in practice. It demonstrates how small and large institutions alike have found creative and effective ways to engage in field conservation – often through partnerships with NGOs, local communities or other zoos and aquariums.

Regularly reviewing objectives and outcomes ensures that projects remain aligned with conservation needs and institutional goals, and sharing results helps to build support both internally and among wider audiences. By incorporating these elements, the guide encourages a holistic view of field conservation that integrates planning, implementation and learning.

Ultimately, the guide aims to encourage more zoos and aquariums to develop and progress effective and impactful field conservation. By making the journey accessible, actionable and inspiring, it supports institutions in turning ideas into meaningful actions and in strengthening their role as conservation organisations. Remember, even modest efforts can grow into long-term, high-impact conservation!

The guide is available for download on the EAZA Member Area under Resources (Zoo and Aquarium Management)

1 - Determine who needs to be involved
2 - Explore your general direction
3 - Identify your priorty areas
4 - Identify and explore partners
5 - Set targets
6 - Write your plan
7 - Determine needed resources
8 - Communicate your plan
9 - Execute your plan
10 - Evaluate and adapt



Background and explanation of the step

STEP 1

DETERMINE WHO NEEDS TO BE INVOLVED

Who should be involved in developing our institution's field conservation plan? Early engagement with teams through information sharing, discussions, and active participation proves to be highly beneficial when developing your plan. This approach helps address concerns and assures teams that it is an opportunity for growth. Starting discussions early with relevant parties, seeking team input, and testing ideas can foster a sense of team ownership and show appreciation for their expertise. A representation from across the organisation/different layers of the organisation (for example educators, keepers, communicators, PR/marketing) can be valuable.
Keep in mind that the team may change depending on what step you are at.

Tip from the Conservation Committee

TIP

Play the EAZA 21+ Game: "Walk a mile in my shoes"!

It offers a fun and interactive way to engage with colleagues from various job roles and explore diverse perspectives on what conservation means for your institution.

Suggested questions to ask yourself and your team

- ☐ **Who needs to be actively involved vs. who needs to be informed?**
- ☐ **Who has the expertise we need for the process of developing our plan?**
- ☐ **Who is going to coordinate the process?**
- ☐ **Who is going to make the final decisions?**
- ☐ **How long is the process of development expected to take?**

Links to examples, templates and other resources to consult and explore, within or outside the EAZA Member Area

EAZA

MEMBER AREA

Conservation strategy session @ EAZA Conservation Forum 2024

The Conservation Project Manual focuses on planning and implementing projects/plans but follows similar principles and steps.

Review the (Field) Conservation Strategies shared by EAZA Members

How to do strategic planning
A guide for small NGOs - includes templates and exercises on how to prioritise and additional questions to ask yourself.

From Cornwall to the Carpathians

HOW THE LINKING LYNX PROJECT IS SUPPORTING THE CONSERVATION OF THIS THREATENED SPECIES

Farah Adaci, Communications Lead, and Holly Farmer, Conservation Evidence Manager, both Wild Planet Trust; and Tracey Twomy, Senior Keeper, Newquay Zoo

Europe's Carpathian lynx (*Lynx lynx carpathicus*) population encompasses around 2,300 individuals across genetically isolated mountain ranges. The Lynx EEP and Deutscher Wildgehege Verband are part of the Linking Lynx Sourcing Working Group, which has been working to connect isolated lynx populations stretching across the Carpathian, Alpine and Dinaric mountain ranges.

When the EEP, coordinated by Dina Gebhardt from Bern Animal Park (Switzerland), selected a kitten born at Newquay Zoo (UK) to be part of a reintroduction project, we were very excited to be involved in potentially returning a zoo-born animal to the wild, giving it the chance to contribute directly to the recovery of wild populations. Although the outcome of the project did not involve release to the wild, we contributed to the EEP's ongoing success and to Linking Lynx's efforts to evaluate the potential of zoo-bred animals in reintroduction programmes.

Newquay has been successfully breeding Carpathian lynx through the EEP for over a decade. In the last breeding season, breeding pairs in European zoos produced mostly male offspring. Therefore, in mid-January 2025, Newquay Zoo's eight-month-old female kitten was highlighted as an animal who could provide a valuable genetic contribution to *in situ* conservation efforts and thus be sent to a release programme.

The EEP and Linking Lynx network saw an opportunity to test whether a zoo-born animal with standard zoo husbandry (in other words: keeper presence during daily management, positive reinforcement training used to facilitate access to enclosure areas, etc.) could be a candidate for release. Typically, an animal is selected to be part of a release project prior to birth; therefore, there is more early involvement in preparing the animal for release, which includes minimal human contact from birth. Newquay Zoo's standard husbandry approach for carnivores includes naturalistic challenges such as whole food items and enrichment. Compared to the regular routine, 'The major husbandry change made was to minimise human contact,' explained John Meek, Curator of Plants and Animals at Newquay Zoo. The zoo applied the adapted management plan for the candidate lynx between January and April 2025. Additional health tests and behavioural studies were conducted during the three months of preparation.

On 29 April 2025, the 11-month-old lynx left England for Karlsruhe Zoo (Germany). Karlsruhe Zoo is an important partner of the Linking Lynx network, providing specialised breeding and preparation enclosures.

On arrival, the young lynx was housed in a large enclosure, and for five weeks, Karlsruhe's team subjected her to behavioural assessment, such as her ability to catch live prey and open up deer carcasses. The lynx demonstrated numerous promising traits; however, one test exposed a flaw for wild survival: when confronted with a dog, simulating a potential threat, she responded with curiosity rather than wariness. In June, Newquay staff received the news that she would not be part of the release programme. While the outcome was not what we had hoped, these studies provide valuable guidance for the housing and husbandry of future animals involved in the project. The female from Newquay Zoo will remain in Karlsruhe to breed and continue contributing to the EEP population.

The collaboration between Newquay Zoo, Karlsruhe Zoo, the EEP and the Linking Lynx network exemplifies how collective efforts can advance the long-term conservation of a species – highlighting, in particular, the vital role that animals bred in human care can play in supporting population recovery in the wild.

NEWQUAY ZOO'S LYNX IS TRANSFERRED TO HER NEW HOME © GABRIELLE BOTTONE

THE LINKING LYNX PROJECT

Formed in 2019, the Linking Lynx project (www.linking-lynx.org) is one of Europe's most ambitious carnivore conservation initiatives, aiming to establish a connected wild lynx population across Central Europe. The project is supported by six working groups that coordinate animals for reintroductions, monitor genetics in wild populations, aim to improve lynx health and support public outreach and advocacy.

The silent apex

UNVEILING THE SECRETS OF NEW GUINEA'S CROCODILE MONITOR

Borja Reh, Accreditation Coordinator, EAZA Executive Office; and Milagros Robledo, Head of Herpetology, and Jesús Recuero, Technical Director and Head Veterinarian, both Bioparc Fuengirola

The crocodile monitor (*Varanus salvadorii*), or Papuan monitor, is not only one of the world's most enigmatic reptiles, but also a formidable apex predator, silently ruling the treetops of New Guinea's dense forests. This arboreal lizard embodies the delicate balance between the challenges and opportunities of conserving lesser-known species. Its elusive nature and the limited knowledge of its behaviour and ecology have drawn the attention of herpetologists and conservationists alike. This has sparked a global effort to uncover the crocodile monitor's mysteries and to secure its place in the wild.

GLOBAL COLLABORATION IN *EX SITU* CONSERVATION

For decades, EAZA Members and their global counterparts have made remarkable strides in *ex situ* conservation of the crocodile monitor. Through innovative breeding programmes, specialised diets and habitat designs that simulate the reptile's natural home, zoos have enhanced the health and longevity of individuals in human care, as well as unearthed critical data on their behavioural and ecological needs.

In a landmark initiative, leading herpetologists and zoo professionals from regional associations such as EAZA, the Association of Zoos and Aquariums (AZA, USA), and the Zoo and Aquarium Association (ZAA, Australasia) have collaborated to create the Crocodile Monitor EAZA Best Practice Guidelines. This comprehensive resource offers detailed protocols on enclosure designs, breeding methods and veterinary care, ensuring the highest standards for managing this species in zoos.

The strength of this global network was exemplified by the recent transfer of nine crocodile monitors from AZA institutions in the USA to EAZA zoos in Europe. This coordinated effort has boosted the genetic diversity of populations in human care while creating new opportunities for scientific research to inform future conservation strategies.

REDISCOVERING THE CROCODILE MONITOR IN THE WILD

One of the most exciting breakthroughs during the development of the Best Practice Guidelines came from fieldwork in New Guinea by the Tenkile Conservation Alliance. Their camera traps set in the Torricelli Mountain Range captured images of crocodile monitors thriving at unexpected altitudes (up to 1,500 metres above sea level) and in temperatures as low as 18°C (Reh and Thomas, 2022).

These findings challenge the long-held belief that the species is confined to lowland rainforests, showcasing its remarkable adaptability to diverse environmental conditions. However, they also underscore the existing lack of knowledge about the crocodile monitor's ecology and distribution, highlighting the critical need to protect its entire habitat range.

ADDRESSING THREATS IN A SHIFTING LANDSCAPE

Although the crocodile monitor is currently listed as Least Concern on the IUCN Red List, this classification belies the growing threats it faces. Habitat destruction driven by logging, agricultural expansion and infrastructure development is rapidly eroding the forests that form the natural home of the species. Organisations such as the Tenkile Conservation Alliance play a crucial role in addressing these challenges. By combining long-term monitoring with community engagement, they document the impacts of deforestation and advocate for sustainable land use practices. Such efforts are vital for mitigating threats and ensuring the preservation of the crocodile monitor as well as the broader biodiversity of New Guinea.

TOWARDS THE FUTURE: PARTNERSHIPS FOR THE CROCODILE MONITOR

The crocodile monitor remains both a biological curiosity and a testament to the value of collaborative, science-based conservation. Recent findings on its distribution and progress in *ex situ* care highlight the results that dedicated efforts can achieve. These advances underline the value of partnerships between zoos, researchers and local communities in supporting conservation. By leveraging our collective knowledge and resources, we can ensure that the crocodile monitor continues to inspire awe and wonder for generations to come.

We would like to give a sincere thank you to our AZA colleagues Laura Debnar and Dwain Uyeda at Honolulu Zoo (USA) and to Andy Reeves, AZA Crocodile Monitor Studbook Keeper at Omaha's Henry Doorly Zoo and Aquarium (USA), for their vital support and collaboration; this project would not have been possible without them.

REFERENCE

Reh, B. and Thomas, J. (2022). *Range extension and new ecoregion records of the Crocodile Monitor Varanus salvadorii (Peters & Doria, 1878) (Reptilia: Varanidae) in Papua New Guinea.* Journal of Threatened Taxa, 14 (7)

The forgotten crisis

NEW STATISTICS SHOW THAT AMPHIBIANS ARE CLOSER TO THE EDGE THAN EVER

CHECKING *ATELOPUS AFF. SPUMARIUS* AT CRIA VENEZUELA © JAIME CULEBRAS

Jonathan Wilken, Executive Director, Amphibian Ark

It has been 20 years since the amphibian extinction crisis first inspired a burst of conservation action, during which the zoo and aquarium community played a key role.

Over the intervening period, the crisis has become worse than ever. At the same time, attention has flagged and resources for amphibian conservation have become more scarce.

Amphibians remain the most threatened of all vertebrate groups, but there are reasons for hope. *Ex situ* conservation breeding has a critical role to play in this.

LOSING AMPHIBIANS

The latest IUCN assessment identifies almost 3,000 amphibian species as heading towards extinction; 800 of these are at extreme risk of extinction (Critically Endangered or Extinct in the Wild). No other class of vertebrates is doing nearly as badly.

It is suspected that 222 species have already disappeared. Currently, the world is losing amphibians at a rate of one species every four months.

This amphibian extinction crisis was first properly described in 2004. The IUCN's first Global Amphibian Assessment described a biodiversity catastrophe: the pending extinction of a third of all amphibians. The most dramatic declines were due to a devastating amphibian pandemic: chytridiomycosis. Extinctions were happening in real time as populations were being studied.

There was a swift response: the IUCN mobilised, new amphibian conservation organisations were formed and the zoo and aquarium community rallied.

Nearly 20 years later, the Second Global Amphibian Assessment (initiated in 2015 and completed in June 2022) showed that the situation had worsened. Now 41% of all amphibians are facing extinction – nearly half of an entire vertebrate class.

A CRISIS WITHOUT RESOURCES

Despite this growing crisis, amphibians remain by far the least resourced of all terrestrial vertebrates.

Amphibians make up nearly half of all the terrestrial vertebrates that are currently Critically Endangered.

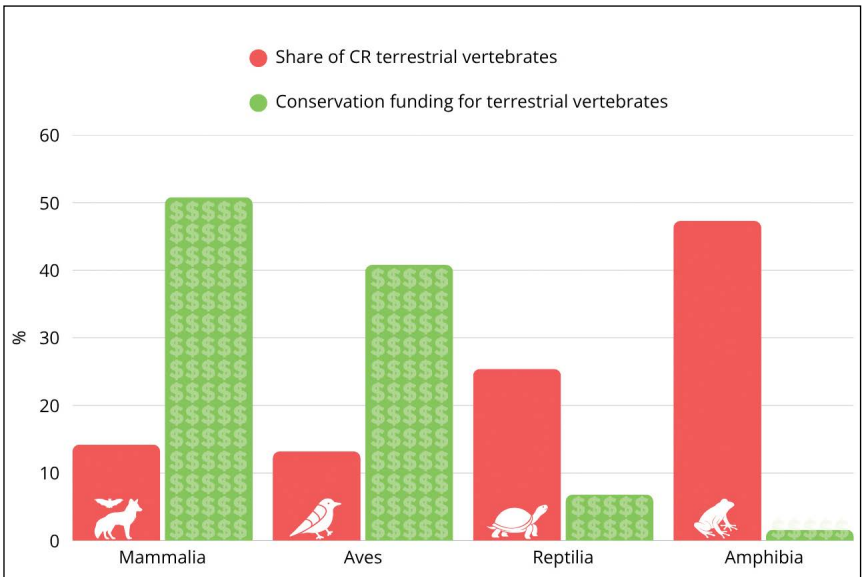


Figure 1. Percentage of Critically Endangered (CR) Terrestrial Vertebrates and Conservation Funding by Class

However, a recent global review revealed that they receive just 1.6% of the available conservation funding.

RESTRICTED RANGES, HIGH RISK

Many amphibian species are highly specialised and have ranges far smaller than other vertebrates. Threatened amphibians are especially restricted: a typical Critically Endangered amphibian has a range of just 45 km^2 – half the size of Paris.

As a result, the main threats to amphibians have a disproportionate impact. For species so restricted, localised disruption could impact their full range.

The very characteristics that make amphibians so intrinsically vulnerable can also allow for rapid recovery. Because ranges are small, targeted protection can be effective and more easily implemented.

Research shows that micro-reserves – protected areas smaller than 10km^2 – can be just as effective as much larger reserves in securing the diversity of threatened amphibians and can better target species in need. Micro-reserves can be cost-effective, politically more feasible and often more quickly implemented.

RECOVERY OF THE VALCHETA FROG

The recovery of the Valcheta frog (*Pleurodema somuncurense*) exemplifies how rapid recovery is possible and how cost-effective it can be, even in the face of dramatic threat.

The Valcheta frog is a Critically Endangered micro-endemic, restricted to 32 km^2 in Patagonia and threatened by agriculture, dam construction and introduced trout.

The species was identified as in urgent need of *ex situ* rescue at Amphibian Ark's first Argentinian Conservation Needs Assessment workshop. It had already disappeared from nearly 30% of its former range.

Within 10 years, specialist training was delivered, a breeding facility established, habitat restoration launched and reintroduction trials begun. Four wild sites were restored, more than 5,500 *ex situ*-bred animals released and new healthy wild populations established.

This work was locally driven (led by Argentina's National Scientific and Technical Research Council) and the programme has most likely averted the extinction of the Valcheta's frog. The cost to save a species was just US$50,000 per year.

CONSERVATION BREEDING'S KEY ROLE IN AMPHIBIAN RECOVERY

This success also highlights the key role *ex situ* conservation breeding can play in amphibian recovery.

Many species are declining so rapidly that habitat restoration alone cannot happen quickly enough. In these circumstances, *ex situ* rescue can be the key for reducing the risk of extinction, and can speed up recovery.

THE WORK OF AMPHIBIAN ARK

Amphibian Ark was set up by the IUCN and WAZA as a crisis response organisation for amphibians.

We focus, as much as possible, on working in range countries with local institutions and experts to:

- identify the species most in need through AArk's Conservation Needs Assessments;
- build local capacity by providing specialist training; and
- support *ex situ* breeding efforts for the most at-risk species through building partnerships and providing funding through the AArk grant programme.

Since the IUCN's initial call to action, some 75 species of amphibians on the brink have been secured in *ex situ* rescue programmes. A quarter of these programmes, like that for the Valcheta frog, are already reintroducing animals to the wild.

A NEW GLOBAL COALITION

Amphibian Ark is also part of a new coalition of organisations, together with the IUCN SSC Amphibian Specialist Group, the IUCN SSC Conservation Planning Specialist Group, the Amphibian Survival Alliance and the Amphibian Red List Authority. Together we are building a full end-to-end approach to recovering amphibians, following the 'Assess » Plan » Act' model.

The coalition aims to deliver country-specific programmes, guiding, building capacity, funding and empowering local conservation action. This will involve:

- regularly assessing extinction risk and identifying conservation priorities;
- developing stakeholder-inclusive, national recovery plans for all threatened amphibians;
- building, strengthening and mobilising local amphibian conservation networks;
- establishing *ex situ* rescue and biobanking programmes for the most at-risk species; and
- equipping local teams with the resources and skills that are needed for long term, science-based conservation.

We are greatly encouraged by the IUCN's recent resolution calling for an 'urgent scaling-up of investment in amphibian conservation needed to prevent further extinctions'. We believe we have the model that would see such scaled-up investment allocated in the most effective way for recovering amphibians.

WE NEED TO DO MORE

Even though there is hope for amphibian recovery, the conservation community will have to act quickly if we are to avoid further extinctions. More resources and technical support are urgently needed. And the zoo and aquarium community has a unique and proven role to play.

For more information about Amphibian Ark, visit: https://www.amphibianark.org/

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GOLDEN POISON FROG (*PHYLLOBATES TERRIBILIS*)
© MANUELA SCHLÄPFER, ZÜRICH ZOO

Supporting our EEP Coordinator community

A RECENT SURVEY BY THE EAZA POPULATION MANAGEMENT ADVISORY GROUP REVEALED THE CHALLENGES FACED BY EEP COORDINATORS AND HOW OUR COMMUNITY CAN SUPPORT THEIR WORK

Leah Williams and Amy Humphreys, EPMAG Vice Chairs, Chester Zoo; Rebecca Biddle, EPMAG Chair, Twycross Zoo; and Elmar Fienieg, Population Management Centre Manager, EAZA Executive Office

Joint management of animal populations is the cornerstone of zoo conservation. One zoo alone would struggle to host an entire population of a species, but multiple zoos working together can. This cooperative management is in place for more than 600 species across EAZA institutions. Ensuring these *ex situ* populations persist into the future to continue to fulfil their chosen roles is a challenging task, which is undertaken by dedicated EEP Coordinators, who volunteer to run these important programmes alongside their job roles. EEP Coordinators are typically supported by a Species Committee and a range of advisors. Thanks to this collaborative approach, we can maintain demographically stable and genetically diverse animal populations while creating opportunities to support species conservation.

EEP Coordinators are also supported by the EAZA Population Management Advisory Group (EPMAG), established in 2003. EPMAG complements the EAZA Population Management Centre in providing Coordinators with technical and scientific guidance. The group consists of 16 people from 13 institutions across six countries, including many experienced EEP Coordinators and specialists from different scientific fields related to population management.

WHAT EEP COORDINATORS NEED

The role of EEP Coordinator is incredibly diverse. Coordinators keep the Studbook for their species, carry out population analyses and predictions and develop breeding and transfer recommendations – typically to maintain genetic diversity, avoid space issues and ensure that the population remains stable. They may also work with researchers, educators and *in situ* partners, all while championing welfare and promoting best practice in husbandry. Ultimately, all this work serves to fulfil the roles of the EEP, contributing both to conservation and to the wider EAZA community. This all takes time and expertise.

To better understand what EEP Coordinators need to succeed in their roles, EPMAG conducted a survey in 2023; we'd like to thank the 185 Coordinators who responded to the survey.

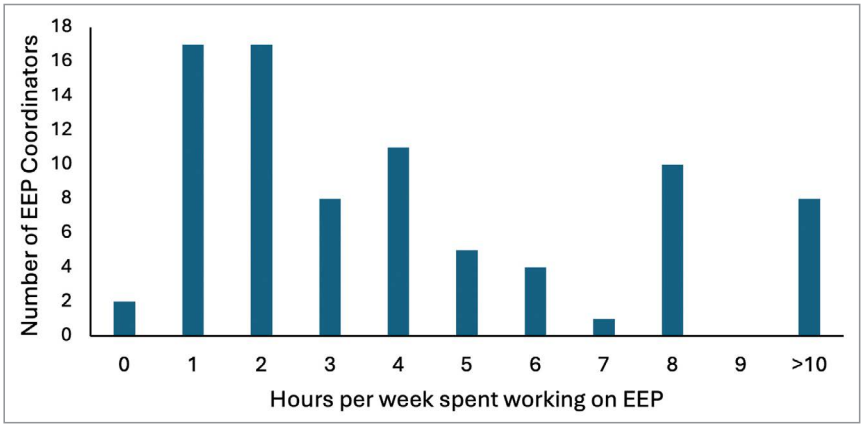

FIGURE 1. THE AVERAGE NUMBER OF HOURS COORDINATORS SPEND WORKING ON THEIR EEP PER WEEK. THESE NUMBERS VARY OVER THE WEEKS, ESPECIALLY WHEN DEVELOPING BREEDING AND TRANSFER RECOMMENDATIONS

KEY FINDINGS FROM THE SURVEY

One outcome from the survey is that we now have a better understanding of the time required to coordinate an EEP. On average, Coordinators spend 4.1 hours per week (with a median of 3) working on their EEP. However, this varied hugely (see Fig. 1). Furthermore, more than a quarter of respondents mentioned that the time spent on their EEP varies greatly throughout the year, and several clarified that it can be a full-time job for a week or two when developing transfer and breeding recommendations. The majority of EEP Coordinators do not work according to a set schedule, but work whenever they have time available or when holders get in touch.

The main outcome from the survey is that many EEP Coordinators could still use more support: nearly two thirds (65%) of Coordinators responded that they would like help or support with their EEP. So, what type of support is needed?

First, they need backing from their institution to do this work. While the majority receive the necessary institutional support, some commented that due to workload or not being desk-based, they have to complete EEP tasks in their own time. Many EEP Coordinators also requested technical support; the area for which the most help was requested was PMx analysis and processes, followed by support with recommendations (see Fig. 2A). Support is also needed for work in the 'Communication' category, with Coordinators seeking assistance for aspects of their EEP such as *in situ* conservation links, research and education (see Fig. 2B).

With these needs in mind, what do EEP Coordinators see as the most effective way to receive support? Popular suggestions included having a personal mentor, self-teaching materials and online guided sessions. More than half of the EEP Coordinators who responded are already supporting other Coordinators, revealing that the community aspect of EEP management is important. These Coordinators help others mainly with PMx, ZIMS for Studbooks and more general advice.

WHAT'S NEXT FOR EPMAG?

First, all relevant groups and Committees can consider the results of the survey for their decision-making. Second, EPMAG has expanded its remit with a new mission to support the EEP Coordinator community. This has already resulted in the development of a Welcome Pack for new Coordinators, and several videos with tips and tricks. A new webinar series, highlighting some of our amazing EEP Coordinators and their stories, is also in preparation.

Besides that, EPMAG will use the information to help potential new Coordinators understand what it's like to run a programme.

JOIN THE COORDINATORS!

Although coordinating an EEP requires hard work and commitment, Coordinators gain much from it professionally as well as personally, and so do the supporting zoos or aquariums. Above all, it is the wider community and the species' conservation that benefit; this is at the heart of what it means to be an EEP Coordinator.

Are you tempted by the idea of coordinating an EEP yourself? Many new and important EEPs have been identified in recent years and a list of vacant programmes looking for a Coordinator is available on the EAZA Member Area (under TAGs). If you are interested in embarking on this exciting mission, reach out to the relevant TAG Chair or EEO liaison and join the EEP Coordinator community!

SUMMARY OF RESPONSES FROM EXPERIENCED EEP COORDINATORS IN EACH ADVICE CATEGORY

Through its 2023 survey, EPMAG received excellent advice and tips from experienced EEP Coordinators who can help newer EEP Coordinators perform their tasks efficiently and effectively.

- **Responsiveness:** Respond to EEP participants as quickly as possible, even if only with a brief holding email.
- **Time management:** Set aside dedicated time blocks to work on EEP tasks.
- **Support:** Seek help where possible – through an assistant, students, your species committee or colleagues within your institution or across EAZA.
- **Data management:** Keep a clear overview of your data; check for updates regularly and work systematically.
- **Organisation:** Maintain good organisation by keeping clear records and planning ahead.
- **Institutional support:** Secure written support from your institution and ensure that your manager is aware of your commitment.
- **EAZA resources:** Attend relevant EAZA courses and review the Population Management Manual annually.
- **Communication:** Build strong relationships with participants in your EEP to support smooth collaboration.

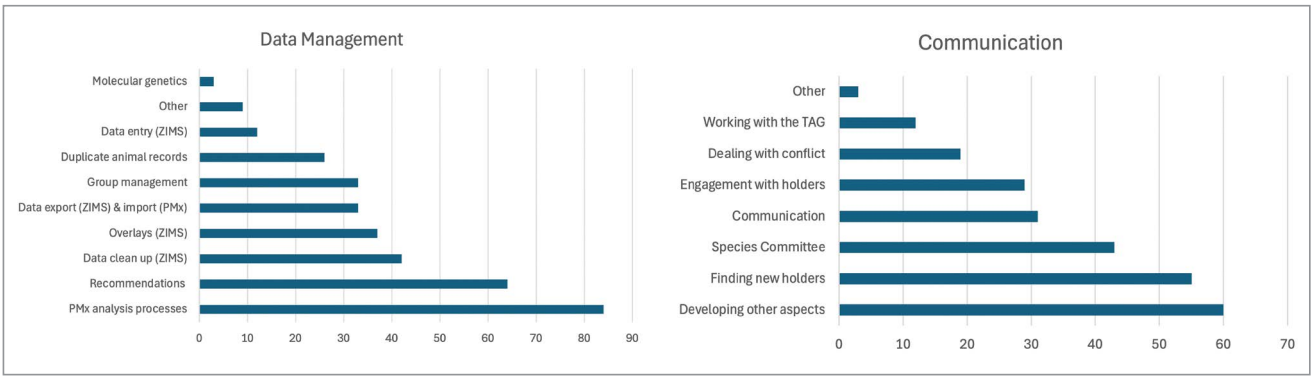

FIGURE 2. AREAS WHERE EEP COORDINATORS WOULD LIKE SUPPORT IN (A) DATA MANAGEMENT AND (B) COMMUNICATION, ACCORDING TO THE SURVEY

Digital tools for better animal welfare

INCORPORATING TECHNOLOGY INTO EVIDENCE-BASED ANIMAL WELFARE MANAGEMENT CAN SAVE TIME AND PRODUCE MORE CONSISTENT DATA

Lisa Holmes, EAZA Animal Welfare Working Group (AWWG) Vice Chair, Chester Zoo; Csaba Harsányi, AWWG member, Sóstó Zoo; and Katherine A. Cronin, Animal Behavior and Welfare Consulting

Optimising animal welfare is a top priority for zoo and aquarium managers, and with the EAZA Accreditation Standards aligning with the WAZA Animal Welfare Goals, it's the topic on everyone's lips.

For decades, keepers have collected data on the animals in their care, from body weight and faecal consistency to environmental and social factors. In recent years, data collection has become more standardised and robust. Under last year's revised zoo standards, EAZA now asks Members to assess animal welfare annually across the Five Domains Model: Nutrition, Health, Environment, Behaviour and Mental Wellbeing. By considering these different aspects, managers can take a more well-rounded approach when making decisions to optimise animal welfare.

However, with limited keeper time and varying impressions of animal welfare, there are challenges. Technology can help us by saving time and increasing data consistency, so that more informed decisions can be made.

WHAT ARE THE CHALLENGES?

Time is a key challenge. While some welfare assessment data can be collected during daily routines, other aspects take longer, such as behavioural observations. Keeper time is limited, and staff training is another challenge. While some zoos employ animal welfare coordinators to help develop assessment processes, many institutions rely on core staff to implement and conduct welfare assessments, with minimal training.

Keepers have extensive knowledge of the animals they care for, but there may be unconscious bias in scoring welfare, given strong keeper-animal bonds. Hence, data consistency and accessibility pose a third challenge. Data may be collected in a variety of ways and stored in different formats – from keeper diaries and whiteboards to isolated data files.

HOW CAN WE IMPROVE DATA-COLLECTION METHODS?

Camera traps and CCTV cameras equipped with remote sensors and infra-red lighting can monitor movement and behaviour during and outside keeper working hours. Reviewing footage at an accelerated speed – for example, with the help of students or volunteers – allows teams to build activity budgets and monitor specific behaviours more efficiently, reducing the amount of staff time required.

EAZA's Animal Welfare Working group has developed a welfare assessment library and guidance documents for implementing welfare assessment processes. Welfare assessment templates with scoring guidance can reduce bias in scoring and increase consistency, allowing users to track the intended welfare changes.

Electronic data-collection sheets enable zoo staff to maintain and track summarised records over time, helping to identify developing issues early and evaluate the effectiveness of mitigations. Some specific tools to consider for data collection include ZooMonitor for real time or video-recorded behaviour and enclosure use; the welfare assessment tool ZAWAPP; and the ZIMS Care & Welfare module, which collates welfare scores alongside other animal record data. Microsoft Forms facilitates standardised collection of responses, while Microsoft Excel templates can be used to collate and analyse scores. The 'pivot table' function in particular is valuable for summarising and visualising results in both tabular and graphical formats.

THE ZAWAPP ANIMAL WELFARE ASSESSMENT APP DEVELOPED IN CONSULTATION WITH SÓSTÓ ZOO, HUNGARY © SÓSTÓ ZOO

HOW CAN TECHNOLOGY HELP TO EVIDENCE MANAGEMENT DECISIONS?

The resources mentioned here can help management teams to develop action plans, track changes and monitor responses. Further, the zoo industry can benefit and build on the experience gained from research in other sectors as technology continues to develop. Several organisations are testing automated behavioural recognition tools that analyse images and videos to rapidly identify behavioural patterns and assess welfare. These technologies could detect rest patterns (and their disruption) in a range of species, as well as monitor mobility and other health issues – particularly when combined with thermal imaging.

By getting comfortable with the technology already available, and partnering with technology specialists, zoo experts can benefit from and influence the development of useful, practical and applied tools that are an essential part of fulfilling animal welfare goals in zoos.

Welcome to Horizon Afrique

A STUNNING NEW IMMERSIVE EXHIBIT BEGINS A NEW CHAPTER FOR MULHOUSE ZOO

Charlotte Desbois, Population Biologist, and Benoît Quintard, Director, both Mulhouse Zoo

Mulhouse Zoo (France) has long served as a regional centre for biodiversity conservation, education and scientific engagement. Building on its long-standing focus on species conservation, the institution has taken a significant step forward with the opening of 'Horizon Afrique', a new thematic area dedicated to two major African ecosystems: the sub-Sahelian zone and the Upper Guinea forest. This large-scale project is the result of more than a decade of planning and collaboration. The exhibit provides visitors with an immersive experience of African biodiversity while highlighting the critical challenges of conservation.

FROM VISION TO REALITY

The creation of Horizon Afrique is the result of a long and complex process, and required more than nine years of preparation, during which zoo professionals, conservation scientists and architects collaborated to integrate animal welfare, environmental interpretation and visitor engagement. The primary challenge was to design a space that could simultaneously serve three objectives: ensure optimal animal welfare, enhance public understanding of ecological systems, and deliver a meaningful educational experience.

Its realisation demanded an additional four years of construction, supported by the expertise of keepers, veterinarians, educators and technical staff. The staff's commitment was essential to overcoming numerous challenges, from designing climate-appropriate structures to selecting vegetation capable of withstanding the local environment while evoking African ecosystems. The project is frequently described by the zoo itself as 'an extraordinary team effort', reflecting the contribution of creativity, adaptability and dedication from all involved.

MAKING ROOM FOR NEW SPECIES AND TAXA

One of the most striking outcomes of the new development is the introduction of 52 new species across all taxa, including arthropods, fish, amphibians, reptiles, birds and mammals. This taxonomic breadth is particularly important from a conservation and education perspective, as it allows the zoo to present visitors with a more comprehensive view of African biodiversity.

This expansion greatly enriches both the educational scope and conservation potential of the zoo. Species range from the emerald cockroach wasp (*Ampulex compressa*), Namaqua chameleon (*Chamaeleo namaquensis*) and the red-and-yellow barbet (*Trachyphonus erythrocephalus*) to Kordofan giraffes (*Giraffa camelopardalis antiquorum*) and pygmy hippos (*Choeropsis liberiensis*). The deliberate inclusion of both emblematic and lesser-known taxa reflects a holistic approach to biodiversity, emphasising the ecological importance of entire ecosystems rather than solely charismatic megafauna.

Beyond display, the project reinforces Mulhouse Zoo's role in *ex situ* conservation. The zoo has joined 12 additional EEPs in conjunction with the development of Horizon Afrique. An example is the West African slender-snouted crocodile (*Mecistops cataphractus*), listed as Critically Endangered by the IUCN. With only 28 individuals currently in the EEP population, Mulhouse Zoo has joined the programme as a 'growing facility', rearing young crocodiles until they reach maturity and can be transferred to breeding institutions. The zoo also joined the Aardvark EEP and successfully trialled a new mixed exhibit with common dwarf mongooses (*Helogale parvula*). The inside habitat of these animals is next to the inside enclosure of the giraffes, creating a beautiful perspective between the smallest and the largest mammals of the Sahelian building.

INNOVATIVE BUILDINGS FOR BETTER MANAGEMENT

Animal welfare science has advanced significantly in recent decades, emphasising the importance of providing zoo animals with environments that stimulate natural behaviours, reduce stress and enhance overall health. Horizon

Afrique reflects these principles in its architectural design. Several species already present in the zoo for decades have been transferred into newly created habitats that are larger, structurally diverse and more ecologically relevant.

For instance, Roloway monkeys (*Cercopithecus roloway*) and owl-faced monkeys (*Cercopithecus hamlyni*), which previously lived in the zoo's historic primate house, moved to spacious, vegetation-rich islands that allow for climbing, foraging and complex social interactions. Similarly, the four female Grevy's zebras (*Equus grevyi*) now have access to a large mixed-species savannah, where they share space with giraffes, Dorcas gazelles (*Gazella dorcas*) and Mhorr gazelles (*Nanger dama mhorr*).

The exhibit reflects how buildings themselves may enhance the welfare of all housed animals. The giraffe's building, for instance, with its roof made from ETFE (a material known for being extremely durable, lightweight and transparent), allows natural night and day cycles. The building is 12 metres high and has adjustable ventilation, securing optimal air quality for the giraffes all year round. Great attention has also been devoted to the acoustic comfort of the animals, as the visitors can access their indoor habitats. As such, acoustic panels manufactured by Barrisol have been implemented, and natural trees have been planted inside to avoid reverberation and minimise noise nuisance. The efficiency of these measures is currently assessed with CCTV monitoring, which, after careful study by the zoo's welfare manager and Akongo's help, will allow for any adjustments needed in the management of both the animals and the visitors to ensure the former's optimal welfare.

By integrating welfare-driven design with ecological authenticity, Horizon Afrique demonstrates how zoos can act as living laboratories for applied animal welfare science and environmental education.

STRENGTHENING CONSERVATION BEYOND THE ZOO

While *ex situ* management is important, being an EAZA institution also means actively contributing to *in situ* conservation. Mulhouse Zoo has significantly expanded its commitment in this area through the Horizon Afrique project. Since the official opening of the new exhibit on 1 August 2025, the zoo has introduced a conservation levy of €1 on each entrance ticket. This mechanism has already generated over €100,000 in just a few months, providing a sustainable funding stream for field-based initiatives.

The zoo has selected four new partner organisations in Africa, each addressing urgent conservation needs. These include the Chameleon Conservation Centre in Madagascar, the Association pour la Sauvegarde des Girafes du Niger (Nigeria), the Taï National Park Pygmy Hippo Project in Ivory Coast, and the Chimfunshi Wildlife Orphanage Trust in Zambia, which supports turaco conservation. By channelling resources to these organisations, the zoo directly contributes to conservation actions on the ground, ensuring that its impact extends well beyond its physical boundaries.

This dual commitment to both *ex situ* and *in situ* conservation has been in the zoo's DNA for a long time and, besides aligning with EAZA's mission, illustrates the One Plan Approach promoted by the IUCN Species Survival Commission.

A PLACE FOR LEARNING AND INSPIRATION

Ultimately, Horizon Afrique is as much about education as it is about conservation. The new area integrates interpretive panels, interactive displays and experiential learning tools designed to reach diverse audiences. Its immersive design allows visitors to traverse different African landscapes, from the dense forests of Guinea to the semi-arid Sahel, fostering a sense of connection and empathy with distant ecosystems. The educational objectives are explicit: to build public awareness of the multiple threats facing African biodiversity – including habitat degradation, climate change and illegal trade – and to encourage behavioural change by illustrating the links between everyday choices and global environmental impacts.

The opening of Horizon Afrique represents a milestone in the evolution of Mulhouse Zoo, positioning it within the broader evolution of zoological institutions worldwide. With nine years of planning, four years of construction and the collective expertise of dedicated staff, this project demonstrates how modern zoos can combine welfare-focused animal management, public engagement and international conservation action. Ultimately, it seeks to inspire visitors not only to appreciate wildlife, but also to recognise their role in securing its future.

CERVUS NIPPON PSEUDAXIS
© MARISKA VERMIJ – VAN DIJK, BEEKSE BERGEN

Understanding the EU Regulation on Invasive Alien Species

WHAT THE INCLUSION OF THE SIKA DEER IN THE UNION LIST MEANS FOR EAZA MEMBERS

Alice Albertini, EU Policy Coordinator, EAZA Executive Office

Invasive alien species (IAS) are a major threat to Europe's native plants and animals and are one of the main direct drivers of biodiversity loss. They also cause significant economic damage and affect human health. To harmonise action across Member States, the EU adopted the Invasive Alien Species Regulation (EU 1143/2014), which came into force in 2015.

REGULATION VS DIRECTIVE

A regulation is a binding legislative act that applies directly in all Member States. Examples include the Nature Restoration Regulation and the Deforestation Regulation (not yet in force). A directive, such as the Birds and Habitats Directives and the EU Zoos Directive, sets goals for Member States, which must then decide how to achieve them through national laws. If you'd like to learn more about how EU laws are made, check out the newly published 'EAZA and the EU – Guide to EU Decision-making and Legislation for EAZA Members' via the QR code below.

Scan the QR code to access 'EAZA and the EU – Guide to Decision-making and Legislation for EAZA Members'

INVASIVE ALIEN SPECIES AND THE UNION LIST

The core of the IAS Regulation is the Union List: the list of species of EU concern. Species on the list are subject to restrictions on keeping, importing, selling, breeding, growing and releasing into the environment. The list is reviewed at least every six years, but new species can be added more frequently. In July this year, 26 new animal and plant species were proposed and accepted: among them was the sika deer (*Cervus nippon*).

EAZA, MEMBER STATES AND THE PROCESS OF ADDING SPECIES

Let's briefly look at how the process of adding species works; understanding it is key to knowing at which stages the EAZA EU Policy Office, and you at national level, can influence it.

Both the European Commission and Member States can propose species for inclusion. Each proposal is supported by a risk assessment reviewed by the Scientific Forum and the IAS Committee (composed of representatives of Member States). Before adoption, the Commission holds a public consultation (open online), allowing stakeholders to provide feedback. As in past consultations, EAZA was one of the many voices that participated, engaging with TAGs and submitting comments supporting the inclusion of the American mink (*Neogale vision*) and American beaver (*Castor canadensis*), while opposing the listing of the sika deer.

After the consultation phase, the Commission drafts the list of species to be added, and the Member States in the IAS Committee must approve it by qualified majority for it to be adopted. As the final decisions are made by Member States, this is also where your coordinated advocacy

at national level can make a real difference. This summer, the addition of the sika deer, along with all the other species proposed, was approved by the IAS Committee.

WHAT IS THE ISSUE WITH THE SIKA DEER?

The sika deer, originally native to East Asia (China, Japan, Korea, Russia, Taiwan and Vietnam), has been introduced to several countries worldwide. In many EU Member States, it poses a challenge for conservation management due to hybridisation risks with the red deer (*Cervus elaphus*) and economic damage caused by browsing, bark stripping and bole-scoring of plantation trees and crops.

HOW DOES THIS AFFECT THE VIETNAMESE SIKA DEER?

The Vietnamese subspecies (*Cervus nippon pseudaxis*), threatened by habitat loss and hunting, is considered Extinct in the Wild. However, when a species is listed under the Union List, the restrictions automatically apply to all its subspecies. This means zoos may keep individuals until the end of their lifetime, but breeding is no longer permitted.

CAN SIKA DEER EEP HOLDERS ASK FOR A DEROGATION?

Yes. When there is a need for *ex situ* conservation, zoos can apply for permits under Article 8 of the IAS Regulation through their competent authorities. While submitting a request doesn't guarantee that a permit will be issued, it is important that applications are clear, well-documented and pragmatic. Providing a solid contingency plan to prevent escapes (including during transport), a realistic number of individuals to be kept, scientific evidence on the conservation status of the Vietnamese subspecies, and an explanation of the importance of the EEP will help authorities to assess requests on a case-by-case basis.

If your permit is issued, it will be possible to transport and exchange animals between institutions that also have Article 8 permits for this subspecies. Remember that during transport animals must be accompanied by the sending institution's permit until they are covered by the receiving institution's permit.

The inclusion of a species into the Union List also affects how the species are brought into the EU (and how Member States have to regulate it). Therefore, it may also be possible for the permit to include a derogation for the ban of import into the EU, although this is entirely up to competent authorities to decide.

DO YOU NEED HELP?

The European Commission is aware of the conservation importance of the Vietnamese sika deer EEP. You can scan the QR code (right) to watch a Commission video recorded for the EAZA community, explaining how to apply for *ex situ* conservation permits under Article 8 of the IAS Regulation. The EAZA EU Policy Office is also working closely with the Commission and the Deer TAG, looking at making the process smoother for the sika deer. Please note, however, that the responsibility for issuing permits lies with the competent authorities in each Member State. If you have questions, you can contact advocacy@eaza.net.

Scan the QR code to watch the video recording from the EU Commission on *ex situ* conservation permits.

WHAT ABOUT THE INVASIVE ALIEN SPECIES REGULATION AND NON-EU COUNTRIES?

Thirty-seven institutions are part of the Vietnamese sika deer EEP. Among the EAZA holders, two of them are based outside the EU, in the UK and Switzerland (data from International Studbook for Indochinese sika deer, 2024). There are some differences in IAS policies between non-EU countries, which need to be considered to ensure good coordination among holders.

How is the EU IAS Regulation implemented in the UK?

Since Brexit, there may be growing divergence between EU and UK legislation. Nicky Needham, Head of Species Management and Conservation at BIAZA, explains how the UK is addressing the keeping of the Vietnamese sika deer:

'When Great Britain left the EU in 2021, the core part of the EU IAS Regulation was retained. England, Wales, Scotland and Northern Ireland brought their own corresponding legislation into play in December 2019, so the same controls were extended to those species named on the list of Species of Special Concern for England and Wales, and the Scottish list of Species of Special Concern. The EU IAS Regulation still applies to Northern Ireland, alongside an additional local list of 'Article 9 species'. UK zoos can apply for permits to keep the relevant species from the Animal and Plant Health Agency (APHA), while zoos for Northern Ireland have to comply with the same rules as the EU-based zoos.

The sika deer is not currently included on the lists of Species of Special Concern in UK (while it is for Northern Ireland, under the EU IAS Regulation). However, it is unclear how this might change following implementation of the EU-UK Sanitary and Phytosanitary Agreement, which is currently under negotiation. It remains to be seen whether dynamic veterinary alignment will also cover the alignment of these species lists.'

What about Switzerland?

Meret Huwiler, curator at Bern Animal Park, explains that 'importing and keeping the species involves two separate authorisations, regardless of its alien species status in the EU. Because the sika deer is classified as a non-endemic species under Swiss wildlife law, holders must obtain a "husbandry permit". And, in case of imports from abroad, a separate import permit is also required, which is also the case in EU-UK transfers and all other animal moves that cross an external border. For both permits, a management plan preventing animal escape is a key requirement.'

Join the Vet Advisors

WHY EAZA NEEDS MORE VETERINARY ADVISORS – AND WHY YOU SHOULD BECOME ONE!

Catarina Santiago, EU Policy Coordinator, EAZA Executive Office

Every decision a zoo veterinarian makes can ripple across an entire species. Imagine shaping not just the health of individual animals, but also the future of populations across EEPs and across Member institutions. That's what Veterinary Advisors do. We spoke with Arne Lawrenz, Chair of the joint Veterinary Advisor subgroup from EAZA and the European Association of Zoo and Wildife Veterinarians, about why the network needs more advisors and what the role really entails.

Q: Many might assume a Vet Advisor's job is all about individual animal care, but what's the bigger picture? What's the real goal behind the role?
Arne: The role isn't just about treating individual animals – it's about safeguarding the health and sustainability of entire populations. We're looking for ambitious veterinarians who want to make an impact at that level. That means spotting recurring health issues, developing vaccination protocols and deciding which pre-shipment tests are genuinely necessary, focusing on what really matters for population health while still allowing institutions to request additional tests if needed.

Q: What are the main tasks in practice?
Arne: Initially, much of the work involves gathering and reviewing necropsy reports, outbreak histories and vaccination data to identify recurring problems and draft clear guidelines. Over time, the focus shifts to responding to questions from coordinators and institutions, sharing outbreak updates and refining recommendations as new information becomes available. It's a collaborative role that connects colleagues and taps into collective experience.

Q: How does collaboration with other vets work?
Arne: Advisors act as a link


ARNE LAWRENZ

between coordinators and on-site veterinarians. If a zoo faces an unfamiliar problem, the network shares experiences and solutions. Advisors also provide perspective when veterinary concerns come up during transfers, making sure decisions are consistent and evidence-based. Teamwork with coordinators and on-site vets is central.

Q: Can you share a few examples where Vet Advisors have really made a difference?
Arne: Sure. Imagine a genetically valuable animal carrying an infectious disease. A Vet Advisor helps to weigh its genetic importance against the risk to the wider population, finding a solution that preserves genes without exposing other animals. Another example is transferring a breeding animal with a medical history. Opinions may differ on the risks, but the Vet Advisor ensures health concerns are addressed without delaying population management decisions.

Q: Do veterinarians need to be highly experienced to take on this role?
Arne: Not at all. What matters most is interest, responsiveness and the willingness to ask questions. Familiarity with the species is helpful, but anyone eager to learn – including young veterinarians – is welcome. Having more than one Vet Advisor per EEP or TAG is actually a plus, as it encourages discussion, allows for peer support and ensures that someone is always available.

Q: How much time does the role require?
Arne: Much less than most people expect. Some weeks there are no requests at all, while at other times a few hours may be needed to review necropsy reports, provide input to management plans or draft veterinary requirements. The beginning usually takes a bit more time, as you gather past data and set up vaccination and pre-shipment guidelines. Once those are in place, the workload is limited, and tools like shared databases make things easier.

Q: What is the biggest benefit of becoming a Vet Advisor?
Arne: You gain a broader perspective and access to population-level data that would otherwise be invisible. It can open doors to research opportunities, publications and presentations. Most importantly, you contribute directly to the long-term sustainability of species across EAZA, shifting the focus from individual cases to population health.

Q: What would you say to a veterinarian thinking about applying?
Arne: Don't hesitate. You don't need decades of experience or all the answers. Interest, openness and a willingness to collaborate are enough. It's a chance to learn, expand your network and play an important role in the future of your species. Applications are accepted at any time. Encourage your zoo veterinarian to step forward!

For more information or to apply, go to the EAZA Member area (resources – veterinary) on the website or contact the office at info@eaza.net.

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

STAINLESS STEEL NET

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

BUREAU D'ÉTUDES BIOPARC

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

THEY TRUST US

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PRICE – CONTACT US

johanna@bioparc-zoo.fr