

PAST PRESIDENTS OF THE ZOOLOGICAL SOCIETY OF IRELAND

Presidents of the Zoological Society of Ireland*, 1833 to 1837, and 1994 to date; and the Royal Zoological Society of Ireland, 1838-1993.

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Sir Philip Crampton	1833*	Prof. A. Francis Dixon	1927-31
The Duke of Leinster	1834*	Sir William Taylor	1932-33
Captain Portlock	1835-36*	Lord Holmpatrick	1934-42
Sir Philip Crampton	1837-38	Dr. R. Lloyd Praeger	1942-43
The Archbishop of Dublin	1839-40	Capt. Alan Gordon	1944-50
Sir Philip Crampton	1841-42	Prof. John McGrath	1951-53
The Archbishop of Dublin	1843-44	Dinnen B. Gilmore	1954-58
Sir Philip Crampton	1845-46	G.F. Mitchell	1959-61
The Duke of Leinster	1847-48	N.H. Lambert	1962-64
Sir Philip Crampton	1849-50	G. Shackleton	1965-67
The Marquis of Kildare	1851-52	Prof. P.N. Meenan	1968-70
Sir Philip Crampton	1853-54	Prof. J. Carroll	1971-73
Lord Talbot of Malahide	1855-56	A.E.J. Went	1974-76
Sir Philip Crampton	1857-58	Victor Craigie	1977-80
Doctor D.J. Corrigan	1859-63	Alex G. Mason	1981-83
Viscount Powerscourt	1864-69	Aidan Brady	1984-86
The Earl of Mayo	1870-71	John D. Cooke	1987-89
Earl Spencer	1872-74	Padraig O Nuallain	1990-91
J.W. Murland	1875-78	Prof. David J. McConnell	1992-93
Sir John Lentaigne C.P.	1879-84	Prof. David J. McConnell	1994-95*
Rev. Dr. Haughton F.R.S.	1885-89	Joe McCullough	1996-98*
Sir Robert Ball F.R.S.	1890-92	Sean Cromien	1998-2001*
Dr. Samuel Gordon	1893-97	Michael O'Grady	2001-04*
Field Marshal Earl Roberts	1898-1902	Barry Murphy	2004*
Prof. D.J. Cunningham F.R.S.	1903	Michael MacNulty	2005-08*
Earl of Dudley	1904-05	Derek McCleane	2008-11*
Rt. Hon. Jonathon Hogg D.L.P.C.	1906-10	Margaret Sinanan	2011-14*
Sir Charles Ball	1911-15	Tom Dunphy	2014-17*
W.E. Peebles	1916	Michael Daly	2017-20*
Sir Frederick Moore	1917-21	Ann Keenan	2020-23*
Sir Robert H. Woods	1922-26	Carmel O'Connor	2024*

NOTICE OF ANNUAL GENERAL MEETING

NOTICE is given that the annual general meeting of the Zoological Society of Ireland will be held at Haughton House, Dublin Zoo, Dublin 8, on 25 September 2025 at 18:00 for the following purposes:

Ordinary Business:

- 1. To receive and consider the statutory financial statements for the financial year ended 31 December 2024 (the "Financial Statements"), the report of directors on the Financial Statements (the "Directors' Report") and the report of the statutory auditors on the Financial Statements and the Directors' Report.
- 2. To review the affairs of the Company.
- 3. To elect Sam Whitbread as director of the Company with effect from 25 September 2025.
- To re-elect Tom Cassin, who retires in accordance with the Articles of Association of the Company (the "Articles") and is eligible for re-election, as a director of the Company.
- To re-elect Emma Teeling, who retires in accordance with the Articles of Association of the Company (the "Articles") and is eligible for re-election, as a director of the Company.
- 6. To note that Andy Beer retires as director of the Company as of 19 December 2024.
- 7. To re-appoint Deloitte Ireland LLP as statutory auditors of the Company.
- 8. To authorise the directors to approve the remuneration of the statutory auditors.

BY ORDER OF THE BOARD

Tom Cassin Secretary

Registered Office

The Zoological Society of Ireland Dublin Zoo Phoenix Park Dublin 8

Dated 8 July 2025

Note: A member entitled to attend and vote is entitled to appoint a proxy using the form set out in section 184 of the Companies Act 2014 (enclosed) to attend, speak and vote on his or her behalf. A proxy need not be a member of the Company. Proxies must be received at the registered office of the Company not less than 48 hours before the time of the meeting.

ZOOLOGICAL SOCIETY OF IRELAND – BOARD OF DIRECTORS



Carmel O'Connor

Carmel O'Connor was appointed to the Board in 2018 and is the current President of the Zoological Society of Ireland. Carmel is a law graduate from University

College Dublin and a Chartered Tax Adviser. She joined PwC in 1983, and was a partner in PwC for 25 years, including eight years on the firm's leadership team. Carmel is a member of the Governing Authority of the University of Galway and Chair of its Audit and Risk Committee. Carmel is a member of the Governance and People Committee of ZSI. She also serves on the Board of Governors of Fota Wildlife Park.



Tom Cassin

Tom Cassin was appointed to the Board in 2019. He also serves as Company Secretary. Tom is a chartered accountant and a former senior client partner at

Deloitte. He has over 40 years' experience as an accounting, risk, governance, business and charity sector expert and brings this expertise to his role as Chair of the Finance and Audit Committee. Tom is also a member of the Governance and People Committee, and serves on the Board of Governors of Fota Wildlife Park.



Ann Keenan

Ann Keenan was appointed to the Board in 2016. Ann has held senior executive level roles for 40 + years in HR and strategic development in

IBM and DCC plc during sustained periods of fast growth in both organisations. She graduated with a B.Sc. in Pure Mathematics & Computer Science from Queens University Belfast. Ann chairs the Board of FoodCloud, which is an Irish-based, international social enterprise with a vision for a world where no good food goes to waste. She is a three-time

awardee in Women's Executive Network's "Ireland's Most Powerful Women: Top 25" awards. Ann served as President of the Zoological Society of Ireland from 2020 – 2023. Ann is currently Chair of the Governance and People Committee and the Health, Safety and Sustainability Committee. Ann also serves on the Board of Governors of Fota Wildlife Park.



Yvonne Buckley

Yvonne Buckley was appointed to the Board in 2023. Yvonne is Professor of Zoology at Trinity College Dublin where she leads an international research

centre, the Co-Centre for Climate + Biodiversity + Water, and the AIB Trinity Climate Hub. Yvonne's research is on the intersection between climate, biodiversity and people's interactions with nature. Yvonne is a member of the Health, Safety and Sustainability committee.



Andy Beer

Andy Beer was appointed to the Board in 2019. Andy is Chair of the Ethics Committee. He taught at Sparsholt College, Hampshire, UK, from 1982

until 2019. From 2002 until 2019 he led the development of the curriculum for zookeeper training for BIAZA, now the Diploma in the Management of Zoo and Aquarium Animals (DMZAA). From 2009 to 2020, Andy was Resident Zoo Animal Nutritionist at Royal Zoological Society of Scotland. In 2014, he was conferred with the honorary title of Director of Zoo Management Studies, organising the international development of DMZAA programme, and was an invited speaker at international zoo conferences (e.g. EAZA, SEAZA, AZA). From 2021 to the present day, Andy freelances in zoo animal nutrition for zoos and safari parks in the UK, Middle East and India.



Enda Faughnan

Enda Faughnan was appointed to the Board in 2024. He is a member of the Finance and Audit Committee. Enda is a certified accountant and a former long

serving partner of PwC Ireland. He also led their taxation practice for eight years. Enda sits on the board of the Pentland Group, which owns some of the world's best known outdoor and lifestyle brands, and on a number of Irish subsidiaries of EQT AB, a Swedish global investment organisation. Until recently, Enda also sat on the board of Savvi Credit Union, one of the largest credit unions in Ireland. He brings to the Board his extensive commercial, financial, governance and accounting knowledge as well as his experience of dealing with regulatory authorities in Ireland.



Emma Teeling

Emma Teeling was appointed to the Board in 2022. Emma is a member of the Ethics Committee. Emma is Professor of Zoology at University College Dublin and is an

international leader in the cross-cutting fields of mammalian phylogenetics and comparative genomics, with expertise in bat biology. She established the Laboratory of Molecular Evolution and Mammalian Phylogenetics and is a Founding Director of the genome consortium Bat1K. Emma's high standing in the international community is highlighted by her nomination to prestigious academic boards and institutes (e.g. Irish Research Council Board, 2015; member of the Royal Irish Academy, 2016); she was also awarded Chevalier des Palmes Académiques, 2017 by the French Government for her research.



Sharon McCabe

Sharon McCabe was appointed to the Board in 2023. She is a member of the Finance and Audit Committee and the ZSI Project Board oversight committee.

Her experience in the retail and healthcare sectors covers finance, organisational design and development, operational excellence, ecommerce and digital development, and M&A activity. She currently serves as Chairperson of the Retail Advisory Board for McCabes Pharmacy, PHX Ireland. She also holds non-executive director roles on the boards of St. Vincent's Healthcare Holding Company, and Eason PLC. She has held board positions in various organisations, including Cancer Trials Ireland, Retail Excellence Ireland, United Drug Wholesale, and Dublin Chamber of Commerce. Sharon holds a BCL from University College Dublin, a Diploma in Managerial Economics from the London School of Economics and has completed The President's Program of Executive Education at Harvard Business School.



Ciaran O'Keeffe

Ciaran O'Keefe was appointed to the Board in 2024. Ciaran is Chair of the Conservation, Education and Research Committee. Ciaran is a Zoologist by

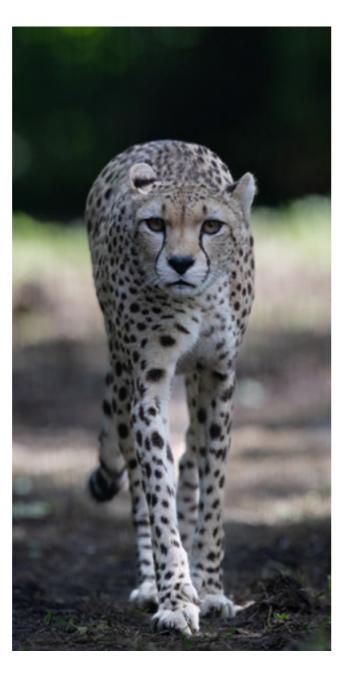
training. He was the manager of Glenveagh National Park in Co. Donegal from 1985 to 1999, and among other projects started the work of the Golden Eagle reintroduction, which was then taken on by the Golden Eagle Trust. In 1999 he moved to the National Parks and Wildlife Service HQ in Dublin where he was responsible for science and many aspects of the EU Nature Directives.



Peter McKenna

Peter McKenna was appointed to the Board in 2024 and is a member of the ZSI Project Board oversight committee. Peter McKenna was appointed as the

Stadium Director of Croke Park in 2001, and was appointed to his current position of Stadium Director and Commercial Director for the GAA in 2011. He is responsible for the operation and management of Croke Park Stadium and is tasked with steering the GAA's sponsorship, media rights, licensing and general games promotion. In 2013, Peter won the Marketer of the Year Award and is the Stadium Business 2016 recipient of the Outstanding Achievement Award. Peter has a strong passion for sustainability and under his leadership, Croke Park stadium has become certified to international standards. The stadium achieved the target of full waste diversion from landfill in 2014 and has maintained this record ever since. Peter is a Fellow of the Marketing Institute of Ireland, on the advisory board of the National Anti-Bullying Research and Resource Centre, and a board member of the National Concert Hall.



PRESIDENT'S LETTER

Dear Member,

The Board of the Zoological Society of Ireland (ZSI) is delighted to present the annual report and consolidated audited financial statements of Dublin Zoo and Fota Wildlife Park for the year ended 31 December 2024.

I am also pleased to highlight some of the significant developments in both Dublin Zoo and Fota Wildlife Park during the year.

The Dublin Zoo ten-year strategic plan, Dublin Zoo 200: Vision 2021-2031, is now three years underway and is making excellent progress. It is a privilege to see the successful implementation of a complex and ambitious plan, with tangible progress being made across our objectives of furthering species conservation, animal care and welfare, and the cultivation of the next generation of conservationists.

The Dublin Zoo Team's participation in national and international organisations, which are integral to our mission, is impressive, with the Zoo Director and many staff members presenting at prestigious forums and forging valuable connections that advance animal conservation and environmental protection. During 2024, Dublin Zoo played an increasing role in furthering Ireland's national efforts in preserving the natural environment, working in conjunction with the National Parks and Wildlife Service in the delivery of objectives under the updated National Biodiversity Action Plan.

Dublin Zoo's Discovery & Learning Department, renamed Conservation Education Department during the year, continued to cultivate strong relationships with primary and secondary schools, actively supporting teachers and maintaining relevance within the school curricula. The team's dynamic approach to teaching, strong collaboration with similar organisations, and unwavering enthusiasm all strengthen Dublin Zoo's role as a vital platform for inspiring young people to engage with and support conservation efforts.

This year, the entire Zoo Team faced the distressing loss of two of our young elephants to the Elephant Endotheliotropic Herpesvirus (EEHV). The skill and dedication demanded of them to save two more elephants who tested positive for this dangerous virus is an indication of the calibre of the Animal Care and Veterinary Teams, and the support of the rest of the Zoo Team. We also lost two elderly animals, Sibu, the Bornean orangutan and Betty, the Western chimpanzee to symptoms associated with old age. The outpouring of support from the public in response was greatly appreciated by the Zoo Team.

As Dublin Zoo moved beyond the challenges of the Covid-19 pandemic, the Commercial Operations Team have been reintroducing popular events and exploring new initiatives that use the unique setting of Dublin Zoo to bring magic to our visitors and to a diverse range of occasions, from birthday parties to corporate training days. The success of corporate events during Wild Lights was especially noteworthy. The Commercial Operations Team also directed another highly successful 'Zoo Live' television series on RTÉ One in May. The entire Dublin Zoo Team participated in delivering three one-hour programmes at primetime on every aspect of the Zoo's work.

2024 was a significant year for Fota Wildlife Park, with the retirement of Park Director Seán McKeown after 15 years at the helm. During Seán's tenure, the Park copperfastened its

position as an iconic family visitor attraction in the southern region. He brought exceptional leadership and vision to Fota Wildlife Park in the area of species conservation, and the contribution of Fota Wildlife Park to national and international conservation programmes is testament to this.

The Board of ZSI was delighted to welcome the appointment by the Board of Governors of Fota Wildlife Park of Aileen Tennant as Park Director. Aileen has the background and experience to lead Fota Wildlife Park into its next phase of development, and with a skilled and dedicated team in the Park, has already successfully dealt with significant challenges and opportunities in 2024.

The other major milestone for Fota Wildlife Park was the celebratory opening, in June 2024, of the most significant capital project in its history – the new Education, Conservation and Research Centre (ECRC). The Centre was built on time and within budget, with the generous support of the Office of Public Works, and was designed and built with sustainability at its core. As well as its foundational activity of education programmes for school students, the ECRC has already hosted many meetings, conferences and events for local, national and international organisations, both within the conservation sphere and beyond. There is no doubt that it will continue to be a highly successful and sought-after venue for events in the Cork region.

As President of the Society I would like to thank the director of Dublin Zoo, Dr Christoph Schwitzer, for his exceptional leadership of the Zoo in 2024. I would also like to thank the outgoing director of Fota Wildlife Park, Seán McKeown, for his tremendous contribution to the Park's development and to wish him well in his retirement. Congratulations and every success to the new director, Aileen Tennant, in leading Fota Wildlife Park through its ambitious plans for the future. Under

the leadership of the Zoo and Park directors, the skilled and exceptionally committed people of Dublin Zoo and Fota Wildlife Park have delivered the results and achievements outlined in this report. The teams embrace employees, volunteers and support partners, who together provide the dedicated animal care, conservation education, retail and visitor services, catering, facilities management, finance and administration, to ensure the missions of Dublin Zoo and Fota Wildlife Park are lived out daily in both facilities.

I wish to express our gratitude to the Irish Government, through the Office of Public Works, for the generous support of the capital investment programmes at Dublin Zoo and Fota Wildlife Park in 2024. Your active partnership continues to enable us to deliver on our ambitious strategic plans, including the important projects achieved in 2024. Dublin Zoo and Fota Wildlife Park are also proud to be playing their part in the National Biodiversity Action Plan and acknowledge the support and collaboration of the National Parks and Wildlife Service in these endeavours.

The lifeblood of Dublin Zoo and Fota Wildlife Park are our visitors; we thank you for your loyalty and support in 2024, which enables us to continue our critical work in conserving species for future generations. We continue to look at ways of enhancing your experience and making your visit to the Zoo and Fota Wildlife Park an even more wonderfully enjoyable day out, with memories that last a lifetime.

I wish to acknowledge and thank my colleagues on the Board of the Zoological Society of Ireland and the Chair and Governors of Fota Wildlife Park for giving generously of their time and expertise during 2024. In 2024, we marked the retirement of Andy Beer from the Board of ZSI after more than five years of giving generously to the Board and executive of his deep experience in animal care and zoological

education. Former President Margaret Sinanan retired from Committee membership, thus ending a long and illustrious association with the Zoo and Fota, and former President Tom Dunphy retired from the Board of Fota Wildlife Park, having made an outstanding contribution to both organisations. Sincere and heartfelt thanks to Andy, Margaret and Tom, each one of whom remains a firm friend of Dublin Zoo and Fota Wildlife Park.

Finally, the ZSI Board recorded with sadness the passing of their colleague, John (Johnny) McMahon, in April 2024. Johnny joined the Board in 2017, having supported Dublin Zoo since 2002 in his capacity as a Heritage Commissioner

in the Office of Public Works. He chaired the Health, Safety and Sustainability Committee and served on the Conservation, Education and Research Committee and the Restaurant/Aviary Project Board. His assistance to Dublin Zoo over the past 22 years - a time of unprecedented development - has been immeasurable, and the Zoo would not be where it is today without his significant contribution. The Board offered its deepest condolences to John's wife Carole, his two daughters Ali and Ava, and his family.

Carmel O'Connor President Zoological Society of Ireland





Sean McKeown
Our retiring director,
Sean McKeown,
has been an integral
part of Fota Wildlife
Park's history. He
joined Dublin Zoo in
1979 as assistant to
director Terry Murphy,

just as Murphy was

developing a plan for a wildlife park. University College Cork leased 72 acres on Fota Island to the Zoological Society of Ireland for this purpose. In 1982, Sean, with a background in zoology, became the Park's founding director. With Carmel Conroy, a Dublin Zoo administrator, and Sean O'Donovan, UCC farm manager and dairy science lecturer, Sean transformed the land into a wildlife park with grassland, islands, shady trees and natural barriers. In 1983, Fota Wildlife Park was officially opened by President Patrick Hillery.

Sean left to work in Dubai in 1995, returning to Fota in early 2009 to drive a significant period of growth. This

started with a new Entrance Plaza (2010) featuring visitor entrance kiosks, public toilets, souvenir shop, admin offices and a meerkat habitat. The Asian Sanctuary, built on 27 acres of additional land acquired from UCC in 2002, was next with the Tropical House and Sumatran Habitat (2014), the Indian rhino habitat (2015) and Asian lion habitat (2016). The South American habitat opened in 2017, and the Education, Conservation and Research Centre in 2024.

Sean had many roles with international zoo organisations serving as a council member and vice chair of BIAZA and council member and treasurer of EAZA. He was also Chair of the EAZA Felid Taxon Advisory Group and Cheetah EEP Coordinator.

Today, Fota Wildlife Park attracts 430,000 visitors, delivers educational programmes to 17,000 learners with a team of up to 100 staff in summer months. Sean's role in the evolution of Fota Wildlife Park is immeasurable. We thank him for his enormous contribution and we wish him a long and happy retirement.





Aileen Tennant

In July, 2024, Aileen Tennant was appointed director of Fota Wildlife Park. Aileen's background is rooted in secondary level science education and curriculum development. However,

her passion includes building capacity in environmental and sustainability education. She joined Dublin Zoo in 2015 as Discovery & Learning Manager, a role that evolved into Head of Discovery & Learning to reflect the department's growing responsibilities. Her nine-year tenure spanned enormous change in the Zoo's delivery of education programmes and public engagement initiatives. The department expanded, taking on new staff, building the Volunteer Programme and introducing innovative learning programmes. In 2017 she led the interpretation plan and fit out of Zoorassic World, and delivered the Volunteer Centre for the enthusiastic team of over 120 volunteers. In 2018, she oversaw the development of

the purpose-built Discovery & Learning Centre with a public engagement space and state-of-the-art teaching facilities, and she coordinated the creation of Wild Space, an immersive outdoor learning space to connect urban communities with nature.

Under Aileen's guidance, the Discovery & Learning Team rose to the challenges presented by the Covid pandemic and created a range of online programmes that brought conservation education to families, schools and community groups around the country.

As a member of the Senior Management Team, Aileen was instrumental in delivering the Dublin Zoo 200 Strategy and, in 2022, Aileen launched an ambitious 10-year Conservation Education Master Plan focused on creating social change for conservation. In 2023, Aileen was voted in as Regional Representative for Europe and the Middle East on the International Zoo Educators Association Board and to the European Association of Zoos and Aquariums Conservation Education Committee. We are delighted to welcome Aileen to Fota Wildlife Park.



DUBLIN ZOO: DIRECTOR'S REPORT

In 2024, Dublin Zoo once more proved to be a popular day out, with 935,491 day visitors and 229,518 visitors to Wild Lights, adding up to a total visitation of 1,165,009, which was slightly higher than 2023. The Dublin Zoo Team was ably supported by our volunteers, whose dedication and enthusiasm were invaluable in enhancing the visitor experience and supporting our mission. The positive feedback we receive from our visitors is a testament to the hard work of every team member.

During the year, Dublin Zoo celebrated the arrival of new animals, including bull elephant Aung-Bo from Chester Zoo, cheetah Callie from Fota Wildlife Park, lion Kushanu from Edinburgh Zoo, and female bongo Annabelle from Belfast Zoo. These additions have enriched our animal collection and will, in time, strengthen our conservation efforts. The Zoo said farewell to several much-loved animals, including Bornean orangutans Sibu and Riona, and chimpanzee Betty, who at 62 years was one of the oldest chimpanzees in human care. Staff and visitors shared many fond memories of

these animals, and we have included an excerpt from team leader Helen Clarke's tribute to Betty in this report.

The outbreak of EEHV in our elephant herd during the summer was both challenging and distressing for the entire Zoo Team. On 30 June, we lost Dublin-Zoo-born elephant Avani, aged seven years, followed a week later by the death of Zinda, aged eight years. Both had succumbed to the Elephant Endotheliotropic Herpesvirus (EEHV), a virus that is common in both wild and zoo elephants and can be triggered without warning. It causes fatal hemorrhagic disease, particularly in juvenile Asian elephants, whose immune systems are insufficiently developed to fight it off. Dublin Zoo activated its EEHV response plan and consulted global experts as soon as Avani's condition became apparent. Despite our best efforts, both Avani and Zinda's illnesses progressed rapidly, and we could not save them. However, the Animal Care and Veterinary Team were able to save Asha, aged seventeen years, and Samiya, aged ten years, who both tested positive for the virus. While no vaccine exists, ongoing



research aims to develop one. Our commitment to elephant welfare remains steadfast. Dublin Zoo is very grateful to Chester Zoo, the Irish and UK governments, An Garda Síochána and many other organisations and individuals for their kind and selfless assistance during this trying time.

Solid progress was made with our ten-year strategic plan and the four outline master plans that sit underneath it - Sustainability, Physical Master Plan, Conservation, and Conservation Education. Solar panels were placed on numerous buildings, new interpretation signage was erected and the fundraising campaign for the Irish Species habitats continued. The Irish Government, through the Office of Public Works (OPW), assisted the Zoo's long-term development plan with a capital grant of €2m in 2024, which enabled us to carry out important sustainability measures and improve animal habitats and site infrastructure. We are immensely grateful to then Minister of State for the OPW, Patrick O'Donovan TD, and to the Office of Public Works for their support.

Several departments of the Zoo underwent reorganisation to integrate new skills that will drive the development of their respective plans. These included the introduction of a Species Survival Officer and the appointment of a Behaviour and Welfare Scientist in the Conservation and Science Department, and, in Conservation Education, the conversion of the Volunteer Coordinator role to a full-time position. Dublin Zoo also established its first in-house Human Resources Department, and created the new position of Head of Commercial Operations to develop and lead its commercial strategy.

Of the many significant achievements relating to the Conservation Master Plan, the integration of Dublin Zoo's conservation objectives into the long-awaited fourth iteration of Ireland's National Biodiversity Action Plan (NBAP) stands out. It was launched in January by Minister of State for Nature, Heritage and Electoral Reform, Malcolm Noonan TD at a ceremony in the National Botanic Gardens, which was attended by the Zoo Director. In what is possibly an EU first, the new NBAP contained five actions for which Dublin Zoo was either the named actor, or to which the Zoo was specifically asked to contribute along with other members of the Irish zoo and aquarium community. The NBAP has been inscribed into statute, which means that the Government and institutions such as Dublin Zoo will be working together on delivering the outcomes.



ANIMAL CARE

2024 was a challenging year for the Animal Care Team, with the loss of several much-loved animals and a crisis in the elephant herd. However, these difficulties were balanced by several significant births and transfers, all managed with exceptional professionalism and strengthened by the support of external experts. In February, elderly male Bornean orangutan (Pongo pygmaeus pygmaeus) Sibu presented with symptoms of a chest infection. Sibu had been showing symptoms consistent with an age-related cardiac and respiratory condition for a number of weeks, which necessitated an in-depth assessment for further medical management. Our vets, together with a multidisciplinary team of specialists, confirmed that he had progressive cardiac disease. He died during the procedure under general anaesthesia. Sibu had spent 32 years in Dublin Zoo; he had been born at Los Angeles Zoo in November 1978 and was later sent to Rotterdam Zoo via Lincoln Park Zoo in Chicago. He came to Dublin in June 1984. From 2001 to 2008, he lived in Rhenen Zoo in the Netherlands on a breeding loan before returning to Dublin. Sibu had eight offspring, of which six were born in Dublin. In June, female Riona, born to Sibu and Leonie in Dublin Zoo in 1996, died from complications of a severe respiratory infection and an acute necrotizing intestinal infection that did not respond to intensive treatment. The post-mortem report indicated cardiac issues as well.

In July, the team was delighted to welcome a healthy male Bornean orangutan infant born to Mujur and the late Sibu. He soon became known as Sibu Junior or "SJ". Mujur showed good maternal care and improved skills compared to her previous births, but despite the Zoo having enlisted the expert help of a group of breastfeeding mothers to let her observe their feeding sessions, she kept holding him too high and would not allow him to feed. After intensive monitoring, the decision was made to retrieve SJ and start bottle-feeding.

He received round-the-clock care by his team of carers in the guest apartment of Society House. While SJ appeared healthy, the arrangement was not ideal for his long-term development. In October, after consultation with the EAZA Ex-situ Programme (EEP) coordinator, SJ was transferred to Monkey World in Dorset where there are facilities and expertise to hand-rear him alongside conspecifics, thus supporting his natural social behaviours. We are grateful to Alison Cronin and her team at Monkey World for giving SJ a new home and continuing his care.





Meanwhile, the troop of Siamang gibbons (*Symphalangus syndactylus*), who continued to share the Orangutan Forest habitat with the Bornean orangutans, was closely monitored



as a female was carrying a juvenile male born in December 2023. The Animal Care Team undertook recall training with the troop and used cameras to monitor behaviours. The orangutans and the siamangs were separated for a period to prevent potential negative interactions and were given

separate islands. In order to achieve this, the connecting ropes between both islands were temporarily dropped until the young animal has grown enough to be considered safe. Meanwhile, the young gibbon is thriving and starting to get more independent from the mother. In 2025, the siamangs will be given an additional island to enable easier separation if required in future.

In the off-exhibit great ape habitat in the Far Side, we said goodbye to another iconic Dublin Zoo animal, Betty, the 62-year-old Western chimpanzee (*Pan troglodytes verus*). Betty was very slowly losing weight despite extra caloric intake and protein shakes. Her age-related conditions included chronic arthritis and declining kidney function. Following an extensive review exercise of focal welfare assessments it was apparent that the trend was not changing, and an end-of-life discussion took place. She was euthanised on welfare grounds in July. Betty had been one of the oldest living chimpanzees in human care. She had arrived in Dublin Zoo in 1964 and participated in the chimpanzee tea parties that flourished at the time. She had adapted very well to the improved habitat conditions introduced in the 1990s and, as

the group was expanded to accommodate an EEP breeding programme, Betty remained a strong-minded animal and an important member of the group.



In January, our Sulawesi crested macaque group (Macaca nigra) returned to their transformed island habitats after an extended period away. The islands now boast new climbing frames crafted from substantial tree logs, offering the macaques a natural and engaging structure that provides three-dimensional movement space and a broader view of their surroundings. Black webbing woven among these trees facilitates seamless transit between different areas of the habitat without necessitating ground contact, expanding their locomotion options. To ensure safety and convenience for animals and staff, new access points from the houses to the island habitats have been introduced. A low-level bridge replaced the former rope connection between the two islands, and a fresh bark substrate has been added to encourage foraging behaviours. Inside, the houses have been refurbished. New communal feeding and resting areas have been integrated to promote natural social behaviours, allowing infants and younger members of the troop to learn a diverse range of social skills. As part of our commitment to enhanced welfare conditions, new ultraviolet lights

have been installed to ensure the animals receive essential radiation for improved metabolism. The introduction of LED lighting inside the habitats enhances the visitor experience on overcast days. Informative signage has been added, providing relevant details about their habitat, natural history, and conservation information. In parallel, our Senior Conservation and Science Officer, Dr Andrew Mooney, reinforced Dublin Zoo's commitment to this Critically Endangered species during the year with a collaboration with the Zoo's Indonesian conservation partner Selamatkan Yaki (further details are contained in the Conservation and Science report). Meanwhile, in March, two Sulawesi crested macaques were transferred to Whipsnade Zoo, England, and in June, two elderly Sulawesi crested macaques (25 and 27.5 years old) were euthanised on welfare grounds.

There were major changes in the elephant herd in 2024. With the departure of Asian elephants (*Elephas maximus*) Yasmin, Anak and their two bull calves Kabir and Sanjay in November 2023, the Animal Care Team monitored the behaviour of the remaining herd for signs of stress. However, all behaviours observed were positive, with the elephants using the entire habitat, including the bull house. On 20 June, Aung-Bo, a 22-year-old male Asian elephant, was transferred from Chester Zoo; the transport went smoothly, and we would like to extend our thanks to Chester Zoo for letting us have this magnificent and gentle animal. Members of the Dublin Animal Care Team had spent time in Chester working with Aung-Bo. Now, several members of the Chester team travelled with him to help the transition process in Dublin. Aung-Bo, the first bull elephant with large tusks in Dublin Zoo, was housed in the bull house. With the arrival of this proven breeding male, Dublin Zoo plans to contribute once again to the population of Asian elephants by breeding from the herd as part of the EEP. The new regulations established by the European Association of Zoos and Aquaria (EAZA) breeding programme for elephants set the maximum (25 years) and minimum (eight years) ages for females to reproduce, and the interval between births (seven years). These parameters aim to reduce the number of offspring from each potentially reproductive female and thus prevent excessive population growth.

The plan to introduce Aung-Bo to the females after an acclimatisation period had to be put on hold when EEHV-1A was detected in the herd. This is a particularly lethal strain of the Elephant Endotheliotropic Herpes Virus with a fatality rate exceeding 85% in elephants aged between two and eight years. Seven-year-old female Avani, the youngest member of the herd, showed the first, very subtle signs of infection. Immediate antiviral treatments were initiated and all elephants were placed under strict observation. The Animal Care and Veterinary teams, supported by the entire Zoo Team, did everything that was humanly possible to save the young elephants. Our friends in Chester Zoo sent over many litres of vital blood plasma on extremely short notice, shared veterinary and scientific advice and offered to help out with manpower through this difficult situation. One of their elephant keepers even drove through the night to bring additional veterinary supplies to Dublin that could not be sourced elsewhere. Despite these intensive efforts, Avani succumbed quickly to the haemorrhagic disease, while Zinda showed a brief response to treatment before deteriorating. Both were gone within the space of a week. The losses were a significant blow to the herd and to the Animal Care and Veterinary teams. Continued intensive care was provided to the herd throughout July and well into August, particularly to 10-year-old Samiya, who responded well to treatment. The Veterinary team conducted daily checks, including blood and temperature monitoring, to detect any further spread of the virus. While all remaining females tested positive for EEHV, the outbreak was eventually contained with no further

fatalities. Altogether, 18 standing sedations were performed on the animals to administer drugs and other support, and to take samples. Finally, after a prolonged quarantine period, Aung-Bo was introduced to the female herd in early August. There was a lot of excitement in the herd, with trumpeting, pushing and shoving, then all elephants settled down quickly. The herd's social integration is being carefully managed, with regular monitoring of all females' oestrus cycles.

In March, following the successful transfer of male Asian lion (Panthera leo persica) Kuno to Zoo Santo Inacio in Portugal, a male Asian lion, Kushanu, was received from Edinburgh Zoo. Five-year-old Kushanu now shares the habitat with nine-year-old resident female Kamala on the recommendation to breed. The Asian lion EEP population currently consist of 125 animals (81 males, 42 females and two individuals of undetermined sex), distributed over 42 institutions. The reproductive potential of the population has decreased considerably; not only are many females older, many are also contracepted and lack breeding and rearing experience. Potentially, fertility is also impacted by inbreeding depression. The EEP is currently trying to put all females in a breeding situation and maximise breeding and rearing success. In the wild, the Asiatic lion currently exists as a single subpopulation and is thus vulnerable to extinction from unpredictable events, such as an epidemic or large forest fire. The species is listed as Endangered on the IUCN Red List.

In April, neutered male common hippopotamus (Hippopotamus amphibius) Ernie arrived from West Midlands Safari Park, England, as a companion for female Heidi. He settled in, ate well and spent time in the pool. Heidi showed great interest in her new companion. However, two weeks later, he was found dead in his habitat. Postmortem results showed a volume of fluid in the pericardium,



brain trauma and organ septicaemia. This would be compatible with a previous medical heart condition and an acute infection caused by commensalist pathogens. In October, a female common hippopotamus, Imani, was received from Antwerp Zoo. She settled in and the team planned an assessment and a surgical event to correct the cataracts in her eyes.



This year, we had two ovum pickups from Southern white rhino Zanta (Ceratotherium simum simum); (further details are contained in the Veterinary Team report). Dublin Zoo's Southern white rhino group currently includes breeding male Chaka (23.5 years old) and females Reni (37 years), Nyala (16 years),

Ashanti (23.5 years), Zanta (23 years), and Malkia, born in 2022. Managing our rhino herd involves careful planning, particularly when introducing breeding females to the bull. A new house was built at the far end of the habitat, and part of the habitat was divided to aid management. In March, we undertook the reintroduction of Ashanti, who gave birth to

male Dakari in February 2020. After Dakari was relocated to Safari Madrid in 2023, Ashanti was reintroduced to Chaka for potential breeding. This process began with daily introductions in the African Savanna habitat. Chaka showed significant interest in Ashanti, and while there were some aggressive interactions, Ashanti firmly held her ground, demonstrating resilience and strength. Over the next few days, the group dynamics stabilized, and the rhino herd shared the savanna peacefully. This successful reintroduction is a testament to the meticulous planning and execution by our dedicated African Plains Team. As poaching in southern and eastern Africa reaches unprecedented levels, a healthy, productive zoo population of white rhinos that can serve as a safety net against extinction has never been more important. Since 2014, Dublin Zoo has been working with the Lowveld Rhino Trust. The trust tracks and monitors black and white rhinos, treats rhinos with snare and bullet wounds, assists with investigating and prosecuting poachers, and translocates rhinos from high-risk areas to safer locations.

In the Humboldt penguin colony, two chicks were born to first-time parents, Belle and Cube, in May. They built their nest at the start of this nesting season and they persistently defended and incubated their eggs for 40 days. The chicks remained in their nest for several months until their down was replaced with waterproof feathers.

Transfers into Dublin Zoo in 2024 included two new species for Zoorassic World in September. These were two pairs of Madagascar giant day geckos (*Phelsuma grandis*) from Fota Wildlife Park and a group of six phantasmal dart frogs (*Epipedobates tricolor*). These new arrivals herald the start of a strategic collection plan overhaul for ectotherms at Dublin Zoo, with a focus on conservation and the plight of ectotherms and their fragile habitats in the wild. Although the giant day geckos are not currently threatened with extinction,



Madagascar is a unique and ecologically distinct island that is experiencing one of the highest rates of biodiversity loss on Earth due to deforestation. climate change and unsustainable activities. We are grateful to our colleagues at Fota for letting us have these striking animals.



In March, six rare breed Galway sheep arrived in the Zoo from a private source. Two ewes and their newborn lambs settled into Family Farm. This addition is part of Dublin Zoo's initiative to highlight rare Irish breeds. Despite facing competition from more productive breeds, the Galway

sheep breed has been brought in to raise awareness about its significance. Preserving rare breeds of domestic livestock is crucial for upholding biodiversity, supporting agricultural systems, and protecting cultural and genetic heritage for future generations. In June, the two adults were sheared, a practice which ensures that the sheep do not overheat during the summer months. In May, a female Northeast African cheetah (Acinonyx jubatus soemmeringii) was transferred from Fota Wildlife Park and settled well into her new habitat, the previous African wild dog habitat in the African Plains. This is the first time since 2003 that Dublin Zoo has kept cheetahs, and the intention is to introduce a male, so beginning a breeding programme here. In August, female bongo (Tragelaphus eurycerus isaaci) Annabelle was transferred from Belfast Zoo as the new companion for our resident female Nyeri. Before long, they exhibited strong social bonding and were often seen together in the habitat and sharing stalls.

Transfers out of Dublin Zoo included two castrated cherrycrowned mangabeys (Cercocebus torquatus), which were transferred to Secret Valley Wildlife Park, County Wexford in February. Secret Valley Wildlife Park is a member of BIAZA and has built up a good collection of primates in recent years, many of which came from rescue centres or private confiscations. Dublin Zoo assisted the wildlife park with finance and expertise to create a suitable habitat for the cherry-crowned mangabeys. In September, after several weeks of crate training, male okapi Leki was successfully transferred to Singapore Zoo on the recommendation of the EEP. In October, after a delayed departure, the transport of the Zoo's three young male California sea lions (Zalophus californianus) to Hainan Ocean Paradise in China took place. The animals were accompanied by Team Leader Eddie O'Brien and vet Emma Flynn; they arrived safely and settled in without problems.

Deaths in Dublin Zoo included Striker, a 27-year-old male Grant's zebra (quus quagga boehmi), who was euthanised in June due to an acute deterioration of his health following an end-of-life discussion. Striker had come from Fota Wildlife Park to Dublin Zoo in 2000 and was well known to visitors. In July, an end-of-life discussion was carried out for 11-yearold grey wolf (Canis lupus lupus) Scars due to his ongoing respiratory issue and exercise intolerance. Although he received treatment with a long-acting steroid and antibiotic, he remained inactive, slow-moving and isolated from the rest of the pack. He was subsequently euthanised. Soon afterwards, 14-year-old female grey wolf Paulina displayed varying degrees of lameness, which continued despite veterinary care. She was euthanised on welfare grounds. And in December, the decision was made to euthanise our female Amur tiger (Panthera tigris altaica), Tundra. She had arrived in Dublin Zoo as a two-year-old in 2017. After a visible decline in her condition, a series of Focal Welfare Assessments were carried out. With the support of the Animal Care Team and the University College Dublin Veterinary Team, the Natural History Museum was able to preserve Tundra's skin and skeleton for future mounting. Prior to this, the museum did not have an Amur tiger in its collection.

Finally, an ongoing nutritional review of the animal collection included assessment of the status of our feeding practices, information from keepers about potential current dietary issues and solutions, and a detailed diet review. An internal nutrition group was formalised. In June, the new, formal, staff-led Enrichment Committee had its first meeting and later in the year, a new Animal Enrichment Policy was presented to, and approved by, the Ethics Committee. A full animal enrichment plan will follow in 2025, so that enrichment will be integrated systematically into the daily routine.

EXCERPT FROM A TRIBUTE TO BETTY, WEST AFRICAN CHIMPANZEE, 1962-2024

by Team Leader Helen Clarke Bennett, Dublin Zoo keeper since 1987

Betty, a West African chimpanzee, arrived at Dublin in 1964. The Zoo at the time still followed along the style of the Victorian era zoos, and Betty and her companions participated in the 'Chimp Tea Parties'. My father Michael Clarke cared for her at the time and said that Betty was always strong minded and would be persistent in getting what she wanted! Given my father's occupation, I was a frequent visitor to Dublin Zoo as a child in the 1970s. This was how I first came to meet Betty. A sign outside the chimpanzee habitat told me Betty and another chimpanzee, Wendy, had arrived in Dublin Zoo on 3 May 1964, five days before I was born.

Betty and Wendy were lifelong friends, inseparable up until Wendy's passing in 2014. While Wendy had a cheeky side, Betty was well able to keep her honest! One of my favourite images will always be that of Betty putting her arm around Wendy to encourage her to go outside with the rest of the troop, when Wendy was stubbornly refusing to leave while the habitat was cleaned. In 2012 Dublin Zoo hosted a joint 50th birthday party in their honour. It was uplifting to see so many visitors turn up to celebrate these wonderful old ladies, and many had memories of seeing them back when they arrived in 1964. Little did I know myself that my first encounter all that time ago was just the start of a connection that would last for decades.

No other Dublin Zoo resident could so neatly encapsulate the positive changes that have happened at the Zoo over

the years. The chimps were originally housed at the 'pit', a concrete enclosure with metal bars for the animals to climb on, where the Waldrapp Ibis habitat is now located. As was common in zoos at the time, there was little to stimulate the chimps other than social and visitor interaction. In the mid-1990s, as progress gathered pace, Betty moved with her troop to the current macaque island, where she experienced natural substrates and trees for the first time. When the African Plains habitats were developed, the chimps moved there and were joined by chimps from Chester and Belfast Zoo. This was Betty's first time to experience socialising within a multi-male/multi-female troop and she thrived. She was a big female, and when a male had her support he could depend on her entirely. Following Wendy's death, we all thought Betty would perhaps follow closely behind, but she continued to flourish as the dominant female of the group. Dominant male chimpanzees hold that position only with the support of the dominant female, and that was the case for Austin, the group leader at the time. Betty also took it upon herself to protect Austin's son Bossou after his mother Kaylie died when he was just five years old.

In recent years, when I visited Betty, she could be observed wrestling and grooming with Austin and Bossou. Despite her clear affection for both of them, she still dominated all feeding times and was allowed to take the choice items because if she didn't get her way, she would show her dissatisfaction by screeching at the other two! As a senior citizen, Betty has been under the constant supervision of Dublin Zoo's Veterinary and Animal Care Teams to manage her wellness. Recently, age-related conditions, including chronic arthritis and declining kidney function, were a sign that Betty's awesome longevity was beginning to take its toll on her health. These conditions were impacting her mobility and her weight, and could not be fixed with further medical

or surgical interventions. This led to the difficult decision made by Dublin Zoo's veterinary and animal care team, in conjunction with management, to euthanise Betty.

While I'm incredibly sad to say goodbye to a companion I've had since childhood, I'm confident that euthanising Betty was the correct decision, ensuring she didn't suffer unnecessarily and allowing her to keep her dignity to the very end. I take huge comfort in that. There will never be another like Betty, and she will be missed dearly by everyone here in Dublin Zoo as well as the many generations of visitors who were fortunate to know her.





SIGNIFICANT VETERINARY PROCEDURES



Dental procedures featured prominently in Dublin Zoo this year, with veterinary dentist Dr Nora Schwitzer and other specialists assisting the Zoo's Veterinary Team. In January, red panda (Ailurus fulgens fulgens) Jasmina presented with a facial swelling, which was caused

by a dental abscess with a draining tract on her right cheek. The tooth in question was removed, along with three other teeth. She recovered well from the procedure. In March, male white-naped mangabey (Cercocebus lunulatus) Danso had a considerable swelling located on the left-hand side of his face in the upper jaw region. A dental examination under general anaesthesia revealed that he was suffering from periodontal disease, with fractures to both his left and right upper canine teeth, along with furcation in his premolar teeth. It was determined that the premolar teeth would need extraction due to the degree of dental disease. Because he is the dominant male and needs to show his canines as a dominance trait, it was elected to save these canines if possible. A root canal procedure was carried out and the cavity was filled in his left canine tooth and sealed with a cap filling. Due to the length of this procedure, a root canal procedure on the right tooth was delayed until a later date. Full scale and polish of all remaining teeth was carried out.

In April, the Veterinary Team worked with marine mammal specialist vet Dr Shawn Johnson of Seachange Health to remove two fractured incisor teeth from the lower jaw of a male California sea lion in the Dublin Zoo veterinary



hospital. The teeth were removed via closed extraction, and the extraction sockets were cleaned and closed. Blood samples were collected from all three of the Zoo's males in preparation for their move to China in September; Johnny was sampled conscious in the hugger, while

Chad had some sedation and anaesthetic gas to facilitate the blood draw. In August, the Dublin Zoo Veterinary Team assisted our conservation partners at Seal Rescue Ireland with a dental operation. Grey seal (Halichoerus grypus) Maumeen had a history of fractured teeth and a fistula under the chin region. Intra-oral radiographs revealed complicated fractures of an immature canine with a drainage tract and signs of osteomyelitis (bone infection). Additionally, there was some evidence of a jaw fracture. Maumeen was intubated and the fractured canine was removed in pieces. The upper left canine also had abrasions and pulp exposure and was removed via closed extraction. The grey seal made a full recovery and was released to the sea shortly afterwards. Finally, in August, newly arrived female cheetah Callie was subjected to a successful dental procedure. She showed a traumatic malocclusion with attrition and wear down to the pulp of both upper canines. Dr Nora Schwitzer opted for vital pulpectomy and minimal crown shortening (the crown was already significantly reduced); no teeth needed to be extracted.

Other significant veterinary procedures this year included a reproductive assessment under anaesthesia of 13-yearold female snow leopard (*Panthera uncia*) Tashi. This was prompted by her ongoing difficulty in getting pregnant. During the check-up, the vets found two lumps in her mammary glands. Mammary lumps are common in older female animals, often due to hormonal changes. The vets also checked her reproductive organs, which showed signs of low activity. Tashi's blood tests came back normal, except for low levels of a hormone called progesterone, suggesting she was not in her fertile period. Prof. Dr Thomas Hildebrandt, head of the Department of Reproduction Management at the Leibniz Institute for Zoo and Wildlife Research (IZW) in Berlin, worked with the Veterinary Team on Tashi's procedure. Tashi was moved back to the house, where she was reunited with her partner Otto, and she recovered without incident.

In September, female Eastern bongo Nyeri had some wounds around the face that required suturing. After a health and safety brief, a standing sedation was carried out by dart injection to allow examination of the wounds, followed by cleaning, clipping and debriding as necessary. Sutures were placed in the nose wound to bring the wound edges together. The wound on the left side of the lower mandible was a tear of the epidermis only, so the subdermis was not penetrated. This did not need to be stitched. Antibiotics and antiinflammatories were administered, alongside an opportunistic intradermal TB test and bloods for biochemistry. We also administered a clostridial vaccine. In September, male dhole Scott's recovery proceeded well after complex surgery for a leg fracture. His reintegration into the pack was carefully managed. Progress was observed with weight-bearing on his injured leg but in November, examination under anaesthesia revealed that, following the earlier surgery with the implant of an intramedullary pin, there was a slight 'catching' feeling at the top of Scott's femur, suggesting the pin was in communication with the pelvis. It was suspected that this was the cause of the animal's lameness after his successful surgery. The pin was removed, and he recovered well.



In May, female Southern white rhino Zanta underwent an ovum pick-up (OPU). This is a procedure to collect oocytes (egg cells) from an animal that may not be able to breed naturally, for possible future implantation into a surrogate mother. Zanta was anaesthetised using a blow dart. To ensure a clean

procedure, her intestines were emptied and cleaned with warm water and disinfectant. Under ultrasound guidance, a needle was carefully inserted near her ovaries to collect follicles. Approximately 20 follicles were collected from both ovaries, and uterine issues were identified, making natural breeding unlikely for Zanta. She recovered from anaesthesia without any issues. The collected fluid containing oocytes was filtered, and at least four oocytes were found. These oocytes were then transported to a lab in Italy for a special maturation process. Due to their importance for the conservation of Southern white rhinos, all collected oocytes will undergo maturation, in vitro fertilization and cryopreservation for potential implantation into a surrogate rhino. A second ovum pick-up from Zanta was carried out by the IZW in December, with up to 16 eggs collected. The ova were fertilised in Italy and sent to the IZW in Berlin for storage until they are flown out to Kenya to be implanted next year.

We would like to thank all external specialists for their generous support of Dublin Zoo's Veterinary Team throughout the year.

ZOO LICENCE

The annual National Parks and Wildlife Service (NPWS) inspection of Dublin Zoo proceeded as usual in April. This year, the inspection included our conservation, research and education provision, as well as all standard animal welfare, health and safety and veterinary aspects. In the inspection report, the inspectors commended us on our excellent conservation and education facilities and achievements, as well as on the high standards of animal welfare. The report noted that, "in addition to exceptional dedication to conservation, the zoo continues to strive to continually improve animal habitats within the zoo, with a clear focus on animal welfare", and went on to say that, "the inspectors would like to emphasise that the overall standard of husbandry at Dublin Zoo continues to be excellent. Enclosures are well considered and beautifully presented and standards of cleanliness are very high". The report contained six licence conditions, which were discharged within a 28day period. A clean zoo licence for the year was received in October.

In early January, Dublin Zoo received a request from the NPWS for information and documents pertaining to 17 animal welfare allegations that had been made via a protected disclosure in late 2023. In June, the special inspection report from the NPWS in response to these mostly historical allegations (2004–2022) was issued to the Zoo. The investigation found that all but one of the 17 allegations were unfounded, with no evidence to support their narratives. The remaining one, dating back to 2004 and relating to the death of a sea lion, was supported by the available evidence, but Dublin Zoo had resolved the underlying issues many years ago when the current Sea Lion Cove habitat was created. The last paragraph of the report's executive summary refers to a previous report and, once again, acknowledged the high standards of animal welfare at Dublin Zoo as follows:

As stated in the 'Dublin Zoo, Special Zoo Inspection Report, 14 of July to 7 of October 2022', "Animal welfare is a core part of Dublin Zoo and it continues to strive to move forward raising standards and building on its strong foundations, adapting when mistakes occur and providing a culture that promotes world-class husbandry and strives to be the best it can. They are clear in these goals and have been nothing but transparent in their communication of what they believe and how they want to take Ireland forward in global conservation and best practices in zoo animal husbandry". This inspection team has found that this continues to be the case and Dublin Zoo continues to evolve and develop its already high standards and commitment to animal welfare and compliance with the legislation.

The report was published on Dublin Zoo's website in a slightly redacted version that was agreed between the Zoo and the NPWS to adhere to GDPR legislation.



HORTICULTURE

The Horticulture Team's work around Dublin Zoo follows the seasons, beginning with hedge trimming, which had to be completed before 1 March as there is a ban every year on this activity between March and October to protect nesting birds. General mulching took place in spring, followed by weeding, cutting back, seed dispersal prevention, and mulching along the perimeter fence with our own compost throughout the summer, and finally leaf litter collection and frost protection towards the end of the year. During the summer, a very significant growth of Ceratophyllum sp., which had invaded the lower lake, was successfully dealt with; a special boat was hired to retrieve it. Works were carried out to finish the sides of the new concreted paths by the Kaziranga Forest Trail. Vegetation behind the penguins was cut back in preparation for the installation of a new fence. Likewise, vegetation around the Meerkat Restaurant was cut back and lifted to improve the maintenance of the area.



In March, in collaboration with the National Parks and Wildlife Service, the Horticulture Team visited Glenveagh National Park in the Derryveagh Mountains, Donegal, and retrieved over 100 specimens of *Dicksonia antarctica* tree ferns. The ferns, an Australian native plant that can grow up to four meters tall, had originally been planted in formal gardens around the Victorian castle. They had now spread to the surrounding native oak/birch woodland, where they overshadowed the native flora, thus reducing biodiversity in these ancient woodlands. Under the guidance of Glenveagh's Head Gardener, Seán Ó Gaoithín, Dublin Zoo's team went up the mountain above the formal gardens and down a steepsided rocky ravine into the woodland, where there was an abundance of moss, lichens and native ferns, as well as the Australian fern. After two days of intensive digging, the Dublin Zoo Team under senior horticulturalist Pat Kane acquired over 100 Dicksonias of varying sizes, which will greatly add to the visitor experience and to Dublin Zoo's botanical collection. Seán Ó Gaoithín also gifted the Zoo



two plants of Dahlia 'Matt Armour', grown from seed by a gardener at Glenveagh in the 1930s. We are very grateful to Seán and to the NPWS team at Glenveagh.

In June, the Horticulture Team won the BIAZA award in the sustainability category with Dublin Zoo's new animal waste management system.

VISITOR OPERATIONS

The main Dublin Zoo gift shop by the Zoo's entrance delivered consistent results in 2024. During Wild Lights, two additional cabins were opened, but they did not perform particularly well, with visitors preferring to purchase items in the warmth of the gift shop instead. In the African Plains, the small shop remained on restricted access, staffed by one person with sales driven largely by drinks, ice cream and confectionary. It is usually closed on weekdays during the quieter times of the year.

For the first time, Dublin Zoo produced its own calendar, which sold well. It featured photos of Dublin Zoo animals taken by Patrick Bolger and highlighted key international animal days. We continued to sell toys by Nature Planet; a portion of their profits goes to a conservation charity, which is currently the Red Panda Network. The Fahlo Animal Tracking Bracelets once again proved to be hugely popular; retailing at €20.00, we stocked a large number of animals in this series. In February, Head of Visitor Operations Mark Bowes, together with team members Frances Quinn and Pat Kennerk, attended Spielwarenmesse, the toy convention in Nuremberg, Germany, to look for potential new stock for the Zoo. Spielwarenmesse is the world's largest toy fair, with 2,345 exhibitors from 68 countries. New items for our



gift shop arising from this event included wooden animals, puzzles and games, and Splat's animalthemed painting set. We also extended our range of sustainable eco toys from Keel and Wild Republic, two companies that supplied items to the gift shop following the 2023 Nuremberg toy convention. In October, we stocked up for Wild Lights, but this year we selected items that had a general rather than a specific association with the theme, 'A Journey Through Time'. These items included Viking, Roman and medieval shields, keyrings and a range of Christmas plush and Sensory Snuggables for Sensory Night. We had a broad selection of dinosaurs, which continued to sell after Wild Lights ended.

Following the cyber-attack on the ticketing system in Fota Wildlife Park during the summer, experts from the National Cyber Security Centre assessed Dublin Zoo's website and ticketing system. Due to the structure of Dublin Zoo's ticketing system, it was significantly less vulnerable to this type of attack. Nevertheless, additional security measures were put in place to further protect the system. With almost 50% of Dublin Zoo visitor tickets purchased online, a 'conservation euro' option was made available, allowing visitors to add a euro for the Zoo's conservation work. The option was also made available at the entrance gate. The pilot scheme was reasonably successful on the website but did not go so well at the gate.

As part of the Zoo's sustainability programme, a Re-turn reverse bottle vending machine for recycling plastic bottles



and cans was installed and in operation from Iuly onwards. To raise funds for our conservation projects, a donation button was incorporated into the machine and, given a choice to reclaim money or donate, 1,728 people, roughly 45% of those who used the machine, donated their refunds. This year,

the donations will benefit Selamatkan Yaki, the project for Sulawesi crested macaques in Indonesia.

In November, led by Mark Bowes and his team, Dublin Zoo hosted the third iteration of our annual Sensory Night at Wild Lights as a celebration of inclusivity and community engagement. By incorporating quieter environments, resting spaces and thoughtful facilities, Dublin Zoo created an environment sensitive to the needs of neurodiverse visitors who might otherwise find noise and crowds overwhelming. A six-week work experience programme for four students in partnership with Down Syndrome Ireland commenced in May. This was aimed at helping participants gain skills and experience in a retail environment. Working alongside two of the Zoo's Visitor Operations staff as mentors. Liam, Lia, Fintan and Shauna undertook a wide range of tasks in our gift shop, from taking notes to pricing and merchandising products, and always with a smile and an unwavering commitment. Their work not only helped the Visitor Operations Team but also demonstrated the power of inclusion and diversity in the workplace. Early in July, the students, together with their families and members of the Zoo Team, celebrated the completion of the programme with a graduation ceremony.

200

CATERING

Overall, 2024 was a poor trading year in top line sales although the gross profit margin was maintained and staffing was well managed. Outlets that did particularly well were HB at The Cove and the Wuff truck near the Kaziranga Forest Trail. The Hot Chocolate truck and the Donut Cabin, both of which were added for Wild Lights at the gate, did very well. During the year, BaxterStorey introduced an Eat Smart app for Zoo staff to allow them to pre-order and pre-pay for meals and snacks; a €5.00 credit was given to each person who signed up.

In September, Sharon Hollywood, BaxterStorey Operations Manager at Dublin Zoo, won the Manager of the Year Award at the BaxterStorey People Awards. The awards night, held in London, brought together nearly 300 BaxterStorey team members from across UK, Ireland, France, the Netherlands and Norway. Since joining in May 2022, Sharon has made a huge impact on the catering services here at Dublin Zoo.



Managing eight busy locations throughout the Zoo, Sharon has dedicated countless weekends, put in long hours, and led a team of 120. all while keeping solid profit margins. Her innovative ways to forecast visitor numbers and proactive approach to audits truly show her forward-thinking leadership.



FACILITIES

Capital works in Dublin Zoo this year concentrated on the infrastructure including fencing, pathways and roads. Buff tarmac on the pathways in the African Plains was replaced with concrete. The concrete, coloured to blend in with the habitats, will require less maintenance in the long run, especially with regard to tree root damage. It is also more sustainable, as we are using low-carbon concrete to reduce our CO² emissions. Extensive maintenance and improvements were carried out at the African Savanna, including a new animal shelter, repairs to the giraffe yard and habitat surfacing. The electrical substation in the African Plains was upgraded. Also in the African Plains, the old African wild dog habitat was altered, a new shelter added and signage installed to become the new cheetah habitat. The timber bridges on the Kaziranga Trail as well as safety fencing at Kaziranga were replaced, and the elephant bull house was prepared for the arrival of Aung-Bo, the mature bull elephant from Chester Zoo, with changes to the drainage and the metal work. Improvements were introduced into the houses on the primate islands in the lower lake; existing lighting was replaced, new UV lighting including wire mesh protection was installed, electrical boards were upgraded for additional lighting, and shelves/perching were built. An irrigation system was installed in the orangutan house to provide higher humidity levels for the animals.

An electric power outlet was added adjacent to the exit for new electric mobility buggies, which are now available to rent by adults who may find it difficult to get around the Zoo. New lockers were also installed to allow visitors to store scooters and other possessions safely. A review of equipment for the Horticulture and Animal teams was carried out. A new walkin fish freezer was acquired for Sea Lion Cove. This expensive piece of equipment was purchased after extensive research, including the rental of a similar freezer to test if the quality of the fish was maintained at the achieved temperatures.



From the beginning of the year, a new approach to requesting work from the Facilities Department was introduced, at first to the Animal Team only. All job requests from staff members are now recorded on a dedicated job request spreadsheet using Microsoft Teams. The jobs are prioritised and

reviewed on a weekly basis. Assistant curator Marc Enderby created a form for use by the Animal Team and will review job requests with the Facilities Team.

During the year, Authenticate, the procurement and contract management services provider, was appointed to carry out a tender process for the cleaning contract and the security contract. Authenticate ran the process independently of Dublin Zoo. Existing contractors, Ryans Cleaning and Synergy Security Solutions, were the successful bidders. Both companies and their team members are deeply committed to Dublin Zoo, and work in close partnership with the Zoo Team.

SUSTAINABILITY

This year, the Sustainability Master Plan moved forward with the acquisition of 1,180 solar panels as well as preliminary work on the introduction of a Building Management System (BMS). Solar PV panels were placed on numerous roofs

around the Zoo following a survey by SSE Airtricity to identify which buildings would suit their installation. These buildings included the administration building, the stores, the horticulture offices, the vet hospital and guarantine building, the Discovery and Learning Centre, and the gift shop at the front gate. Solar panels were also installed on the zebra and oryx houses and the staff mess room in the African Plains. The work was carried out by OHK Energy following a tender process and will continue into 2025, with the giraffe and gorilla houses still to be completed when the weather improves and the animals can spend more time outside to allow for the installation works. Meanwhile, a comprehensive review was conducted into the introduction of a sophisticated Building Management System (BMS). Once installed, the BMS will monitor electrical energy and water consumption, and will have the capacity to control equipment such as pump boilers and air handling units. The solar panels will be integrated into the BMS, as will water management. In addition, an improved system for visitor waste recycling was finalised, a Re-turn reverse vending machine was installed, and segregated waste bins were clearly labelled to encourage additional segregation of waste.



A cross-functional sustainability group was established early in the year to contribute towards the sustainability focus of Dublin Zoo. The group met monthly with senior managers in attendance. John Barcroft of The Environmental Edge provided the group with independent advisory and consultancy services. Data gathered by the teams was used to create targets and goals, and to measure performance. Later in the year, the remit of the Health and Safety Committee of the Board of the Zoological Society of Ireland was extended to include sustainability and environmental issues; John Barcroft, together with Health and Safety consultant John Munro and the Director, sit on this committee.

HEALTH AND SAFETY

In-house health and safety training for staff was delivered as required throughout the year. Training courses included general health and safety induction and training, fire warden and fire safety training, first aid refresher, manual handling, ladder safety, telescopic loadall and giant machine training, forklift training, front wheel loader training, loading shovel training, water safety awareness, abrasive wheel training, woodchipper training, agromat training, tractor training, spiral lift training, mobile elevated work platform (MWEP) training, buddy training, dignity at work training, autism awareness, Down Syndrome awareness training, and diversity and inclusion training. Emergency drills were carried out at intervals during the year. Zoonosis and kitchen hygiene workshops were held for the Animal Care Team in all animal sections.

John Munro, MD of Conformity Engineering Assessments Ltd, continues to support Dublin Zoo on matters regarding health and safety. In addition, we engaged health and safety risk management consultant Gemma D'Arcy to support a revision of the Zoo's safety statement and associated policies.

HUMAN RESOURCES

This year, Dublin Zoo appointed its first in-house Head of Human Resources (HR). Mark O'Connor commenced in the full-time role in June, taking over from consultants, MSS: The HR People. MSS director, John Barry, and his team had been supporting Dublin Zoo in all HR and industrial matters since 1988, and we are very grateful for their services over more than 35 years. There was an extended handover period with Amy Vickers, MSS Head of HR Services, gradually reducing her working days in Dublin Zoo. Towards the end of the year, Michele Orr was appointed to the role of HR and Recruitment Administrator; her role is to support both the changes planned for the HR function in the Zoo and to replace the administrative role undertaken by MSS.



In spring, Dublin Zoo began the process of achieving excellence in diversity and inclusion by liaising with the Irish Centre for Diversity, a body that supports organisations through its structured framework 'Investors in Diversity'. Dublin Zoo achieved the

Investors in Diversity Bronze accreditation, which was the first milestone in the process. The Zoo's Diversity, Equity, Accessibility and Inclusion (DEAI) working group carried on with its efforts towards silver accreditation while fostering a diverse and inclusive workplace environment. The DEAI working group was invited for lunch with the Lord Mayor of Dublin, Daithí de Róiste, in the Mansion House early in the year; the Wild Lights Sensory Night and other events for neurodiverse people and their families were discussed.

In July, Mark O'Connor presented a draft People Strategy for the Zoo. This outlined the benefits of digitising the HR services as well as the need to implement an action plan in response to an Investors in Diversity Survey, which had been conducted earlier in the year. The introduction of a

Human Resources Integration System (HRIS), development and communication of new organisational values, and the implementation of strategic development activities for the senior management team, as well as the introduction of a new position – HR and Recruitment Administrator – were key actions within the People Strategy, which will continue into 2025.

In the autumn, Sage People, the new HRIS, was launched and was operational by December. Employee details, all recruitment activities and Animal Care Team rosters were transferred to the system. The HRIS worked in tandem with the existing system and will continue to do so until the switchover can be delivered safely early in 2025. Initial reports indicated that the system will deliver significant efficiencies once fully functional.

The HR Department conducted a workshop attended by members of the senior management and DEAI group to identify new people values for Dublin Zoo. Following communication throughout the organisation, the Dublin Zoo CARE Values were identified and signed off in December. They are: We Care; We are A Team; We are Respectful; and We are Excellent.

During the year, senior management underwent several changes. These included the departure of John Sweeney, who, for nine years, had been financial controller at Dublin Zoo. The reliable financial expertise he had provided, together with his invaluable operational support and guidance, especially during the Covid pandemic, were acknowledged by the Board of Dublin Zoo and by the Director, and we would like to thank him here again for his work. Julianne McNally was appointed as interim financial controller pending the completion of a recruitment process in early 2025.

CONSERVATION EDUCATION

There were significant changes in the Conservation Education Department in 2024. In June, Aileen Tennant, who had been leading the Discovery & Learning Department since 2015, resigned to take up the directorship of Fota Wildlife Park. Niamh Potter, who had been Discovery & Learning Manager since February 2020, was appointed head of the department in her place. Niamh had been an integral part in the development of Dublin Zoo's Conservation Education Master Plan; she also represents Ireland on the BIAZA Conservation Education Committee. Following Niamh's appointment, the department was restructured to focus the work into two main areas: conservation learning and conservation engagement. To reflect international developments and align with the terminology used in the Zoo's Conservation Education Master Plan, the name of the department was changed to Conservation Education.

This year, a total of 62,902 bookings were made through the department. This was a 3% decrease on 2023. The number of learners booked into formal and informal education programmes was 30,011, which was a 4% increase on the previous year. However, the number of learners booked in as part of a self-guided group was 32,891, a drop of 9% on 2023. The strong formal learning programme numbers were due to several factors, including the highly efficient booking system overseen by office coordinator Christine O'Connor; the flexibility of the teaching team and the recruitment of casual teaching staff during peak periods; and the development and refinement of programmes to meet demand from new audiences. The summer camps and one-day workshops maintained their numbers very well but there was a decrease in the number of attendees for weekend workshops and Parent & Toddler sessions during the rest of the year. In a trend seen across Dublin Zoo visitation, group bookings had a challenging year due largely to a drop of 33% on 2023 in the number of primary self-guided groups for May

and June, the peak primary period; this may have been in part due to more competition in this market with the re-opening of Explorium in Sandyford, Dublin, and the new rollercoaster in Emerald Park, County Meath. There was a reduction in bookings from scouts, GAA clubs and similar for weekend visits. However, travel companies re-engaged with spring and summer tours, with many more coming to the Zoo. In autumn, there was a rise in group and self-guided bookings, which made up some of the shortfall experienced in May and June.

Bookings for secondary school level programmes were in high demand in spring, especially for Junior Cycle and Senior Cycle Ecology. These programmes were supported by the SSE Airtricity-sponsored ecology booklets. In spring, we made some changes to our formal primary programmes, which included shortening the usual 75-minute sessions to 60 minutes and narrowing the learning focus to maintain higher engagement rates amongst younger learners. Traditionally, these programmes are referred to as 'school tours', but these programmes are carefully designed learning programmes with key learning objectives planned and executed during the sessions. Primary programmes include 'Rainforest Ranger', 'African Adventurer', 'Dinosaur Explorers' for senior primary level, and a new programme 'Who's Who at Dublin Zoo' for infant classes. These changes also allowed for increased capacity for taught programme bookings. Dublin Zoo's volunteers provide heavy support to those schools undertaking self-guided tours, by delivering learning activities at the Orangutan Discovery Cart, Savanna Discovery Cart, Gorilla Discovery Cart and at the Amur tiger habitat. Keeper talks also bolster the learning for primary schools while on their visit to Dublin Zoo.

In January, 'Wild Behaviours', an informal programme that hadn't been running since 2019, was updated to a 75-minute

teacher-led family workshop, which focussed on introducing families to animal behaviours in an interactive way. The programme received good interest, with 28 adults and children attending the January workshop and 23 attending the April workshop. In February, to celebrate the Chinese Year of the Dragon, the department ran three workshops in partnership with Dublin Lunar New Year. The workshop titled 'Mythical Creatures' introduced families to the origins of some famous myths and the animal inspiration behind them. It was promoted through Dublin Lunar New Year online and print channels, and attracted new families to Dublin Zoo. Two days of in-person spring workshops for children aged 6 – 12 years took place on 15 and 16 February. Also, that month, one informal teen workshop took place, with one more at Easter, both of which received good attendance. Meanwhile, the after-school programmes continued to go from strength to strength, with over double the number of participants attending four-week programmes as compared to the previous year.

During the year, the Conservation Education Team undertook numerous outreach activities, fostering community engagement and strengthening partnerships. In January, there was a high level of engagement with the Dublin Zoo stand at the BT Young Scientist and Technology Exhibition in the



Royal Dublin Society (RDS), Ballsbridge. Many teachers, both regular visitors to the department and potential visitors, engaged with the team to enter the 'Free Class Trip to Dublin Zoo' competition, thus expanding the department's teacher database. The Zoo's exhibition materials were updated and new brochures were designed for primary and secondary teachers. Over the course of three days, the team met with thousands of students, teachers and families at the exhibition, engaging them with biofacts, posters and zoo information. The secondary school, Coláiste Phádraig CBS, Lucan, was the winner of the 'Free Class Trip' competition. In March, Dublin Zoo was represented at the ESB Science Blast, a primary school project-based science competition hosted in Simmonscourt Hall at the RDS. Engagement from school teachers and students was excellent. A competition for a free class trip was run here also, which drove teacher footfall to the stand. The competition enabled more engagement and discussion with teachers and further developed our primary teacher e-mail database.

In March, intern Kate O'Connor from the Marino Institute of Education completed her eight-week work placement with the Discovery & Learning Department (as it was then) where she learnt about volunteer recruitment and training as well as best practice in conservation education. Shortly afterwards, Kate commenced a part-time teaching position with the department to deliver a number of secondary school workshops and the complete suite of primary school programmes as the busy primary school season commenced.

The Discovery & Learning / Conservation Education Team continued to nurture a strong relationship with primary and secondary school teachers. In February and March, Aileen Tennant and Niamh Potter worked in partnership with BIAZA education colleagues in Emerald Park and Galway Atlantaguarium to reinstate the in-person STEAM workshops



at Dublin Zoo and Galway Atlantaquarium, which had been held online since 2021. The STEAM Initiative is now delivered by Oide, a support service for teachers and school leaders established in 2023 and funded by the Department of Education. On 2 March, Aileen Tennant and Niamh Potter delivered an in-person STEAM teacher training workshop to 10 secondary school teachers from around Leinster. The two-hour workshop focused on the role of BIAZA in saving wildlife and empowered participants to work on building a more sustainable future for wildlife. Development education body World Wise Global Schools also delivered a workshop on building a sustainable city, focusing on rethinking the systems in which natural resources are used. As a result of the success of the workshop and the Zoo's excellent facilities for delivering these types of teacher professional development, the team delivered a full-day in-person teacher training workshop in June to Leinster secondary school teachers as part of the Oide summer programme. The training consisted of two two-hour workshops focussing on using active methodologies to teach sustainability topics and on outdoor learning. The feedback was excellent.



(Top left) BIAZA Conservation Education Irish Region Meeting (Above) Secondary Teacher Training Workshop

In April, Niamh Potter, in her capacity as BIAZA Representative for Ireland, hosted the BIAZA Regional Conservation Education Meeting for Ireland in the Discovery and Learning Theatre. BIAZA members from Secret Valley, Ardmore Park, Galway Atlantaquarium and Emerald Park attended. During the meeting, the members discussed the new primary school curriculum changes, how these changes will benefit zoos and how their respective education departments can support schools with environmental and sustainability education. The members collectively provided feedback into the consultation phase of the development of the new primary curriculum.

Following on from the Native Species weekend festivities on 11 and 12 May, Dublin Zoo held its first ever World Species Congress Schools Event on 13 May. The day was open to secondary schools from all over the country and a total of 2,038 students and teachers attended. Most of the conservation partners who had attended the Native Species Weekend stayed on to exhibit in the marquee for this event. There was also a schedule of talks by Dublin Zoo staff and conservation partners at Haughton House, the Farmhouse



and the Discovery & Learning Theatre; topics included the IUCN Red List, Conservation Birding, Reintroduction Successes, Threats to Seals, the Marsh Fritillary Butterfly, Conservation Work at Dublin Zoo and zookeeper Q&As. Volunteer pop-up stations around the Zoo added to the event. Despite very heavy rain on the day, the event was a great success with excellent feedback from teachers. The conservation partners were also pleased to meet face-to-face with students as they do not often get opportunities to raise awareness about their work in such a direct way.

In June, the annual Dreamnight was organised by the Conservation Education Team and keeper Brendan Walsh. Fifty-three children, together with their families, from Temple St. Hospital and Children's Health Ireland Hospital (Crumlin) attended. The entire Zoo Team, together with many of the Zoo's contractors and suppliers, donated their time and skills to make this a memorable evening. Multiple keeper encounters were arranged, and BaxterStorey provided the catering. Wilson Creative, our design partner, created a new Dreamnight logo, which will be used for many years to come.

Ninety-three teachers took part in the annual Primary Teachers Summer Course, 'Cultivating the Next Generation of Conservationists', held in July. This year, for the first time, the programme ran for two weeks instead of one. Excellent feedback was received from participants, in particular in relation to the variety of topics covered, the quality of teaching, the focus on native species and the organisation of the course. In December, members of the Dublin City Council Animal Welfare Team attended a teacher training workshop to shadow our teaching team and learn strategies and tools to engage their own audiences and assist them in improving their skills in engaging with the public about animal welfare.

The ever-popular summer camps took place from 22 July to 9 August. This year, there were three summer camp groups (75 children) per week over three weeks. All camps were fully booked. The team ran a weekly programme of learning activities across the Zoo site, including all classrooms, two camp spaces and Wild Space, supported by three additional camp facilitators and a team of summer camp volunteers. A social story for children with additional needs was created and sent out to the parents ahead of the camp. Towards the end of the summer holidays, nine Dino Discovery family workshop sessions were rolled out. Following the successful summer, uptake for the autumn informal workshops was disappointing. There was also a drop in attendees for Parent & Toddler workshops in autumn. Nevertheless, two days of Junior Halloween workshops and one Teens workshop took place over the mid-term break. The Junior workshops included Halloween-linked topics, while the Teens workshop was based on a 'Young Zoologist' theme.

In October, the Conservation Education Team ran a fourweek careers-based afterschool programme with a group of transition year students. This was a continuation of an initiative started in 2023. The aim of this programme is to work with secondary school students who were interested in careers based around wildlife and conservation, but were unsure of the path they could take or the variety of roles open to them. During the programme, the students met with members of the Conservation Education, Horticulture, Animal Care, Veterinary, and Conservation and Science teams. The programme gave them the opportunity to have meaningful encounters with members of the Dublin Zoo Team to learn about the path they had taken in their current careers and what their jobs involved. Excellent feedback was received for the programme, and the Conservation Education Team plans to build on it in 2025.

VOLUNTEERS

Once more, Dublin Zoo benefited from the invaluable support of our volunteers. Their passion and commitment continued to enhance the zoo experience for our visitors. In 2024, volunteers completed approximately 4,074 shifts, which equates to approximately 15,100 volunteering hours. In January 2024, the total number of active volunteers stood at 80. This increased to 105 active volunteers available for the summer season, with an additional 15 who were resting (120 in total); the numbers dropped for the winter, with 94 active volunteers in November and 11 resting. Overall, volunteer numbers have now returned to pre-pandemic levels. Following a rigorous selection process and training, 39 seasonal volunteers graduated at a ceremony in March. The standard of candidates was exceptionally high, and they came with a broad range of skillsets. During the summer, the seasonal volunteers undertook a total of 810 shifts. In September, 27 volunteers took part in a refresher training session; this new initiative was introduced to support volunteers in reviewing their knowledge, particularly with regard to health and safety issues. At the end of the summer, 31 of the seasonal volunteers joined the Zoo's long-term volunteer programme.

In May, Noreen Fitzsimons resigned from the position of part-time Volunteer Coordinator after 15 years, during which time she contributed enormously to the successful evolution of the programme. Muireann Walshe was recruited as interim Volunteer Coordinator to allow time for the new head of the Conservation Education department to be appointed. In September, Muireann was the successful candidate for the permanent Volunteer Coordinator role, which has become a full-time position in the department, now called Conservation Education. This expanded role provides resources to advance strategic objectives, and further develop the programme, enhance volunteer training and development opportunities, measure the impact of the programme and ensure volunteer

activities are aligned with the Conservation Education Masterplan and the Dublin Zoo 200 strategic plan. Also in May, the Director marked Christel Sudway's final shift on the Volunteer Programme at Dublin Zoo. Christel was a graduate of the first volunteer recruitment in 1987, led by the then Education Officer, Elizabeth Sides. Christel took a short break in the 1990s and returned to volunteer some years later, and has been a dynamic, deeply knowledgeable and engaging volunteer for over 30 years in total.



During the year, the volunteers carried out a wide range of activities, including engaging with visitors on Discovery Carts, in the Discovery Centre, at the nocturnal house. at pop-up stations around the Zoo and at events, some of which were organised by the volunteers themselves. They also continued to support the Conservation Education

Team with ecology workshops, summer camps and other programmes, for school students. They delivered multiple tours to community, charity and other groups, including those attending the WAZA Council meeting at Dublin Zoo in April. On one occasion, 12 volunteers led nine tour groups for 240 scouts and their leaders. The volunteers supported visitor engagement at the entrance to the nocturnal house, educating visitors about the aye-ayes and advising them on how to act while inside the house; during the summer, they maintained a full-time presence at the house. During the

35

summer also, the volunteers delivered numerous events, including Pride Weekend, Cats of Dublin Zoo Weekend, Chimp Weekend, Wolf Weekend and, in September, 'Savanna Safari'. The volunteers also embraced social media, with volunteer Val leading the volunteers' first foray into TikTok, with a tour of the Discovery Centre featuring Halloweenthemed skulls and skeletons. Their efforts enabled Dublin Zoo and the volunteers to connect with a broader audience online.

A process of reviewing and updating volunteer policies began in the autumn, with a view to giving more structure to the programme in terms of commitment requirements, resting and retirement policies, and linking the programme to the Dublin Zoo values. Muireann Walshe and Niamh Potter attended a variety of volunteer-related training programmes run by Volunteer Ireland for support with this. Volunteers were also given the opportunity to make suggestions for topics they would like to see included in the policies. In line with the organisation's focus on improving the visitor journey, work has begun with volunteers on adhering to a more structured schedule at visitor hotspots, particularly during peak periods.

In response to visitor feedback, which suggested that some of the animals were difficult to see, the volunteers supported a visitor engagement project from October onwards. Volunteers took up positions by the lion and tiger habitats with biofacts and other engagement tools; they encouraged visitors to stay a little longer if the animals were not visible, explaining why this might be so, then helping them to seek out the animal or giving them an alternative experience with biofacts and information. They also supported in collecting visitor satisfaction surveys, work that became a key part of a visibility research project led by our Behaviour and Welfare Scientist, Lucy Rutherford. Initial results showed that

when the lions and tigers were not readily visible, visitor dissatisfaction was generally mitigated by interacting with volunteers.

In October, budget was assigned to a new set of rain jackets for long-term volunteers. These are much warmer and more waterproof than those that were previously available, and this investment was welcomed by volunteers. Dublin Zoo volunteers took part in training for the BIAZA 'Spotted on Site' Bioblitz Week in October. The initiative aims to study the diversity of native species present at BIAZA sites, using records sent in by people working, volunteering, and visiting a zoo. Since then, volunteers have been out and about taking photos of native species on the Dublin Zoo site.



Following a trial period, a subscription was purchased for a new volunteer scheduling software called *Better Impact*. This software is used by many large volunteer programmes internationally and is designed to greatly improve the efficiency of scheduling, communication and recording. In early December, *Better Impact* was launched, and all volunteers received their profile. Transition to the app was scheduled for completion by 1 February 2025, but the volunteers adopted it quickly and, by Christmas, most were using it. Recruitment of new volunteers for the 2025 season, which opened on 20 November, also used *Better Impact*. Increased analysis of volunteer activity levels will help the team to understand peek availability periods. Further features will be rolled out in 2025 to assist in volunteer



communication, training, daily engagement plans and impact measurement.

On International Volunteers Day in December, our volunteers received recognition for their work with a visit from the Director at their pre-shift briefing and a pre-recorded message of thanks from colleagues around the Zoo. Volunteers also attended an end-of-year celebration event, which included a behind-the-scenes visit with the elephants, receiving their new jackets and talks from Muireann Walshe, Niamh Potter, the Director, and General Curator Miguel Bueno, followed by a Christmas Lunch.



(Top) Zoo Director Christoph Schwitzer (in his volunteer uniform!) on International Volunteers Day at the volunteers pre-shift briefing (Above) Volunteers Emma and Aoife, Science Weekend Table

COMMERCIAL OPERATIONS

During the year, the position of Head of Marketing and Public Relations became vacant, and the opportunity was taken to reorganise the department and improve Dublin Zoo's capacity regarding commercial operations. In July, Jennifer Dunne was appointed Dublin Zoo's first Head of Commercial Operations. Previously, Jennifer was Director of Customer Experience and Business Excellence at Aer Lingus and had led strategic transformation initiatives and built high-performing teams to drive revenue growth and enhance customer experience. In addition to marketing and PR, Jennifer is responsible for leading and overseeing the delivery of Dublin Zoo's commercial operations and to proactively drive initiatives designed to increase and diversify revenue streams and to increase visitation. In December, Róisín Healy was appointed Dublin Zoo's new Marketing Manager.

Throughout the year, Dublin Zoo was very active across all social media platforms. By the end of the year, we had achieved a total of 507,593 social media followers, with a 14,132,636 social media reach and 556,553 social media engagements. We achieved a total of 102,624 newsletter sign-ups, with an email open rate of 35%. From October onwards, Dublin Zoo began to use TikTok, posting videos on the platform up to two or three times per week with the aim to motivate a young adult audience. September saw the greatest increase in the number of Instagram followers during the year, while October saw the highest reach achieved on Facebook for the year at 1.6 million. These results could be attributed to strong content, which fostered deeper engagement and included the announcement of the good bill of health for the herd of Asian elephants and Bornean orangutan Sibu Junior's departure to the UK.

During the year, the Marketing Team launched several successful media campaigns around new arrivals to the Zoo, all accompanied by photos by Patrick Bolger. In January,

Dublin Zoo celebrated the birth of a baby gibbon which, along with the promotion of 'Monkey Madness' activities for the St. Brigid's Day bank holiday weekend, received great coverage, including an appearance in the Irish Times and a mention on RTÉ's 'Morning Ireland' radio show. In June, the arrival of Callie, the Northeast African cheetah from Fota Wildlife Park, and of Aung-Bo, the bull elephant from Chester Zoo, received widespread media coverage. An on-site interview about Aung-Bo with Assistant Curator Marc Enderby appeared on Virgin Media One news broadcasts. At the end of July, in time for the August bank holiday, the arrival of Asian lion Kushanu was announced and received significant pick-up across print, broadcast and online media.

In addition to the good news stories, Dublin Zoo's Marketing Team had to handle several sensitive media campaigns concerning the deaths of a few of our best-known animals. The first of these was the death of our long time resident, Bornean orangutan Sibu, in February. The announcement was made on the Zoo's social media channels on 29 February and, as expected, received significant pick-up across all media. Thousands of members of the public joined Dublin Zoo in paying tribute to Sibu. The arrival of male common hippopotamus Ernie was announced on 2 May, but this was sadly followed on 13 May with news of Ernie's sudden and unexpected death. Animal Care Team Leader Helen Clarke discussed the topic on 'Zoo Live' that same evening. July was a particularly difficult month, with the news announced on Dublin Zoo social media channels that Avani, the Asian elephant, had died of Elephant Endotheliotropic Herpesvirus (EEHV). On 7 July, the death of a second young Asian elephant, Zinda, due to EEHV was announced. Following the news of Zinda's death, and with the possibility that further elephants in the herd may have been infected with EEHV, the Director held a press call in the Zoo on 10 July. Representatives from the Irish Independent, the Irish Times,

RTÉ, Virgin Media and Newstalk got a detailed breakdown of the situation from the Director, vets Frank O'Sullivan and Emma Flynn, Assistant Curator Marc Enderby and Team Leader Ciaran McMahon. It was also confirmed that Asha and Samiya, two other Asian elephants in the herd, had tested positive for EEHV. The deaths of such beloved animals generated an outpouring of support and kindness from both traditional media outlets and from members of the general public. Thankfully, on 11 September, Dublin Zoo was delighted to announce a clean bill of health for all Asian elephants in the herd.

On 23 July, the death of Betty, the elderly west African chimpanzee, was announced. Animal Care Team Leader Helen Clarke, who first met the Betty as a child in the 1970s while visiting the Zoo with her father, keeper Michael Clarke, wrote a tribute to the elderly chimpanzee, which was published on the Zoo's website, and an excerpt is reproduced in this report.

At the end of July, the Irish Times did an exclusive story about the birth of a male Bornean orangutan to Mujur and the late Sibu, and the subsequent efforts by the Animal Care Team and a volunteer group of breastfeeding mothers to encourage Mujur to bond with the infant. The efforts, unfortunately, were not successful and the infant had to be retrieved from Mujur in order to be hand-reared and eventually moved to a specialist facility in the UK to ensure his survival. There was extensive pick-up on the story in national as well as international media, with coverage in the United Kingdom, America and Australia. A film crew from 'Primate Planet Productions' filmed the young orangutan's departure to Monkey World, which will feature on the show 'Monkey Life' (a TV series based on the work of Monkey World).

On 13, 14 and 15 May, Dublin Zoo once again went live on





Zoo Live series was aired during the primetime hour of 7.00 - 8.00 pmon RTÉ One and centred around a purpose-built stage at the African Savanna. The show followed a similar style and format as that used in 2022, and once again offered an immeasurable opportunity to highlight the excellent work done by the Dublin Zoo Team in terms of animal care, conservation and education. Zoo Live was presented by Anna Daly and Maia Dunphy, with help from celebrity 'zookeepers' Neil Delamare, Karen

RTÉ One. The three-part

Byrne and Nathan Carter; and, for the first time, Fota Wildlife Park featured when comedian Killian Sundermann spent the day as a 'zookeeper' there. Zoo Live was an enormous undertaking, requiring detailed content planning, prerecorded segments, and the management of complex live shows. The excellent collaboration between Dublin Zoo staff, production company Moondance and the RTÉ team ensured all elements came together seamlessly over the three nights. Extensive advance media coverage generated interest in the live shows, which achieved an audience of between 195,000 and 210,000 viewers per episode, with each episode highlighting the beauty of the Zoo and the sheer passion of the entire Dublin Zoo Team.

Other filming projects that took place in Dublin Zoo in 2024 included filming for a new TG4 Irish-speaking TV show, which would teach young children about a range of animals. In May, a team from BBC Science visited the Zoo to film and report on an ovum pick-up procedure on Zanta, one of our female Southern white rhinos. The piece featured on BBC TV, radio and online news outlets, which was excellent publicity



for the conservation work undertaken by the Dublin Zoo Team. Also in May, Tesco filmed a segment of their TV advertisement at the Zoo. The 40-second ad went live on all major TV stations on 27 June and reached over 2.6 million people.

In June, the Marketing Team launched an advertising campaign to drive footfall to the Zoo throughout the summer months. Research conducted by Fáilte Ireland found that activities which took place in nature and in a safe environment, such as Dublin Zoo, provided families with special moments. Arising from this, the tagline for the campaign was created – 'Experience the Magic at Dublin Zoo'. The Marketing Team worked alongside media planners OneCore to deliver a multi-channel promotional campaign, which appeared on out-of-home advertising in all major shopping centres in Dublin and Maynooth. A radio ad was produced and played on traditional radio stations and on digital audio, which included podcasts, music streaming and live digital radio. The Marketing Team partnered with 98FM for the whole campaign and secured great ad spots on 98FM and Today FM radio stations, social media coverage

on the 98FM social channels, as well as multiple week-long



promotions, sponsorships, outside broadcasts, and support in promoting events that took place at the Zoo. On 18 June, 98FM broadcasters Brian Downing and Leanne Hanafin did a live broadcast from the Zoo, which was a great success.

Digital activations as part of the summer advertising campaign included Google advertising on the 'Things to Do' format, which was designed to place Dublin Zoo as one of the top choices when people search 'Things to Do in Dublin'. A paid social media campaign ran from June to August on Facebook and Instagram. The Marketing Team also ran two competitions as part of the summer campaign – a drawing competition, and a 'Strike a Pose' competition, where visitors took photos with the 'zoo-art' boards located around the Zoo.

Other general media highlights during the year included keeper Alan Duffy appearing on Ireland AM's weather updates (Virgin Media), and Marc Enderby and Dr Andrew Mooney speaking to RTÉ Radio One's Morning Ireland about conservation, wolves and the Centre for Species Survival, CSS: Ireland, in January. In February, keeper Anthony McClure took part in an interview with media site 'LovinDublin' about his life in Dublin Zoo; it was posted to the LovinDublin Instagram page, which has 240,000 followers. In November, Virgin Media One's Ireland AM came to the Zoo to do their live weather segment again, this time with keeper Louise McDermott at the Chilean flamingo

habitat. Head of Commercial Operations Jenny Dunne also spoke to presenter Deric Hartigan live on-air about the 2024 Wild Lights theme.

Promotions in 2024 included a 'Mums Go Free' offer for Mothers' Day, a 'Dads Go Free' offer for Father's Day, and a week-long 'Grandparents Go Free' offer in July. Over the June bank holiday weekend, a competition on social media channels offered anyone who pre-booked their tickets online, and any annual pass holders who visited Dublin Zoo that weekend, a chance to win one of three annual family passes. This competition coincided with the 'Bloom Festival' and all Bloom ticket holders were offered half price entry to Dublin Zoo across the bank holday weekend. On 27 June, a 50% offer was announced for Pride Weekend. Finally, in September, a press release was issued, highlighting the positive mental health benefits a visit to the Zoo can bring, along with the announcement of a 50% weekend offer on two weekends in September.

On 27 March, Dublin Zoo was crowned winner of 'Best Dublin Family Day Out' in 98FM's 2024 Best of Dublin Awards against competitors Howth Cliff Cruises and DoDublin Bus Tours. Winning the award gave Dublin Zoo



some added publicity just before the Easter weekend, with mention of it on 98FM's 'Brian Dowling and Suzanne Kane' radio show, 98FM social channels and multiple online articles. Clíona Grall from the Marketing Team was present on the night to accept the award.

WILD LIGHTS

a slight increase on 2023. The 2023/24 season ended on 16 January, while the 2024/25 season commenced on 24 October and continued until 5 January 2025. A survey taken during the 2023/24 season indicated that 57% of the visitors were repeat visitors. For the 2024/25 season, the theme of Wild Lights was 'A Journey Through Time'. Through the bright lantern displays, visitors were transported across time as they discovered the history of the planet through the ages, from the creation of the earth and the dawn of dinosaurs to the rise of empires and early inventions. Once again, Chinese company Vya Creative Lantern Company created and mounted the displays. On the 25 September, a press release announcing the event was issued, and advertising on 98FM, Dublin Zoo's media partner for the event, began alongside an interview with Jennifer Dunne, Head of Commercial Operations. Digital advertising across Facebook, Instagram, YouTube and TikTok commenced on 26 September. A video produced by Moondance Productions, and a Wild Lights montage created by Wilson Creative and animated by Design for Life, with help from media planning agency OneCore, were posted across all social media platforms. Advertising activity for Wild Lights continued on 98FM for the rest of September, where they actively promoted their exclusive 98FM Listener Night, which took place on 23 October. The launch was a great success, and news of this year's Wild Lights theme, along with photography from Patrick Bolger, featured in various national print, radio and online media. Wild Lights also featured on The Late Late Show on RTÉ One television on 18 October. The Wild Lights video produced by Moondance was played to viewers at home while Patrick Kielty spoke about the event and Dublin Zoo's conservation efforts. A €100 gift card to spend on Wild Lights tickets was the 'one for everyone in the audience' gift during the show.

In 2024, Wild Lights yielded 229,518 visitors, which was





In the run-up to the public opening of Wild Lights on 24 October, outdoor advertising for the event ran from 7 to 20 October in all major Dublin shopping centres. The Wild Lights advertisement also appeared on four bridges across Dublin City Centre - at Amiens Street.

Drumcondra, North Strand, and Pearse Street, as well as on digital screens in high-footfall areas at Pearse Station, Connolly Station, Heuston Station and Busaras. The Wild Lights preview night for invited media took place on the 22 October, with many influencers, celebrities and sports stars sharing pictures and videos of the evening on their social media channels. This was the second year in a row where charity Barnardos were present on the media night and raised over €2,000 for families and children who use their services.

The Wild Lights partnership with 98FM continued throughout the season. On several occasions, the radio station broadcast live from the 98FM Thunderbus outside the Zoo. There were multiple on-air sponsorships, promotions and giveaways. All of this on-air activity took place alongside social activity on

the 98FM channels, so it was excellent exposure for Dublin Zoo and the Wild Lights event. In December, Wild Lights featured in many online and print media articles advising readers about what to do during the Christmas season in Dublin. As part of the Wild Lights activity, Dublin Zoo teamed up with local restaurant 'The Hole in the Wall' for a special Christmas giveaway called 'The Golden Toy'. This collaboration was featured in the Irish Independent and The Herald newspapers.

The third annual Wild Lights Sensory Night took place on 20 November, with news of this special night appearing in the Irish Daily Star, on LMFM radio station and across numerous online media outlets. Led by the Visitor Operations Team, the event was tailored to meet the needs of neurodiverse individuals and their families. 1,062 people attended a most successful evening. This initiative underscores the importance of creating spaces where everyone feels welcome, valued and safe to enjoy enriching experiences. An event like this also highlights the broader societal benefits of inclusion, building bridges between diverse groups and creating a shared sense of community – values that the entire team at Dublin Zoo is perfectly placed to support and enhance.





EVENTS

The Events Team had a very busy year, with the return of birthday parties, numerous well-attended corporate events, seasonal events for the public, and several events hosted by Dublin Zoo for international colleagues. For the first time since the Covid pandemic, the team rolled out a birthday party package, which included entry to the Zoo, a goodie bag, and a party table in the Meerkat Restaurant with a meal for each child. The birthday child also received a special birthday gift. Over the course of the year, the team held 92 birthday parties, with over 1,000 children enjoying the experience. One special birthday celebration was held in Haughton House for 98FM broadcaster Brian Dowling Gourounlian, who celebrated his daughter Blake's second birthday with facepainting and games.

This year, Dublin Zoo hosted a wide range of corporate events, each tailored to the client and held in Haughton House, the Discovery Centre or other onsite venues most suited to their needs. Off-site corporate meetings were popular in 2024, with companies bringing their clients to a unique setting, with some returning for a second time; these included a sustainability training day for executives of a large retail company with a welcome speech by the Zoo Director. MSD Animal Health held the global product launch for Bravecto Injectable at the Zoo. It was attended by 40 veterinarians from around the world, and Dublin Zoo vets Frank O'Sullivan and Emma Flynn gave a presentation about the work of the Veterinary Team. During one corporate meeting, an animal escape drill took place, which created a memorable experience for the organisation that chose Dublin Zoo as a venue. There were also 'Wake up with the Elephants' events in April and May for companies including Dublin Zoo sponsors, SSE Airtricity.

Corporate family fun days saw a great turnout this year, bringing in over 4,000 people, the most significant of

which was for Lidl with 2,500 visitors over two days. Some corporate family days were with entry only, but most used Haughton House and catering provided by BaxterStorey. During Wild Lights, the Events Team reached out to some of our corporate contacts to offer room hire in Haughton House, catering and children's Christmas parties as well as Wild Lights tickets for their staff. With help from Wilson Creative, the Marketing and Events Teams created a flyer to promote these Wild Lights corporate packages and advertised them on LinkedIn. The Events Team also contacted potential clients over the phone. The interest was very encouraging, with over 6,000 people attending Wild Lights functions booked through the Events Team.

The Events Team hosted several special events for Dublin Zoo. In February, May, June and July, the Zoo's fundraising consultants, CCS Fundraising, organised a 'Wake Up with the Elephants' cultivation event, for potential donors to the proposed native Irish species habitats. The event included early entry to the Zoo, a morning stroll to the Asian elephant habitat and a keeper talk. The event finished with a short talk by the Director, a presentation and a light breakfast in Society House.

In April, the Events Team oversaw the arrangements for two meetings of the international zoo community, which were held in different venues across the Zoo. The first of these was Species360, which held their board meeting with 21 attendees at the Zoo over three days. The Director led the group on a guided tour of the Zoo. This event ran straight into the World Association of Zoos and Aquariums (WAZA) Council meeting, which was held in the Zoo over two days, with 22 attendees. In September, the Zoo hosted another international gathering, the 34th annual 'Zoohistorica', bringing together 40 zoo enthusiasts, historians and collectors of zoo literature; after a morning session in the Discovery &

Learning Theatre, they toured the Zoo and attended dinner and an auction in the Meerkat Restaurant. The next day they visited Fota Wildlife Park.

Seasonal events organised by the Events Team started with Valentine's 'Love Gone Wild', which took place over 17 and 18 February. The Zoo collaborated with 98FM and ran a week-long promotion from 12 to 16 February, highlighting the event. Each day, listeners were given the chance to win a couple's pass to the Zoo. In addition, we ran a special Valentine's promotion offer that included entry for a couple into Dublin Zoo, a guidebook, a photo/magnet pack and coffee and cake in the Meerkat Restaurant for each person. Themed keeper talks also ran throughout Valentine's weekend.



The annual St Patrick's Day event release was issued on 7 March, with themed photos by Patrick Bolger taken in Zoorassic World. Footfall-driving activities on St Patrick's Day included traditional Irish music in the Meerkat Restaurant, themed magic shows by performer 'Silly Billy', facepainting and arts and crafts. A Leprechaun character was stationed

around the front gate and encouraged visitors to enter the 'Pot of Gold' competition for a chance to win an annual pass. With Easter Sunday being on 31 March, the Easter event press release followed shortly afterwards, with new imagery taken by Patrick Bolger. Activities over Easter included a DJ and kids games around the Great Lawn area, special appearances by the Easter bunny throughout the day, a golden egg hunt where 90 spot prizes were given away, facepainting, and once again arts and crafts. An Easter-themed photo opportunity was also placed at the Plaza for visitors.



On 18 and 19 May, the Events Team held the first of two Dino Discovery weekends. Throughout the weekend, there were several dinosaur-themed interactive activities for all ages to enjoy, including a baby dinosaur petting zoo. Dinosaur fossil clay making also took place, where visitors could create a dinosaur fossil to take home using air-drying clay. There were roaming dinosaurs at the Plaza by the entrance, and an exciting dinosaur egg hatching on the Great Lawn. There was also facepainting taking place in the Farmhouse on both days. June was a busy month, starting with the SSE Airtricity Eco Explorer Weekend for visitors to the Zoo. Over the weekend, there were lots of family-friendly activities where



visitors could learn about sustainable choices and actions. Eco-Rangers guided families along the Eco-Explorer Trail, and Pookie, the sustainability interactive ambassador, answered questions from children. Six corporate family days took place during this weekend. In June, throughout Pride Weekend, there were themed keeper-talks and arts and crafts taking place at the Zoo. There were several events in July including the second of the two Dino Discovery Weekends. On 22 and 23 August, the Events Team held two Story Time events from 4.00 pm to 6.00 pm. The aim of this was to see if promoting

an evening-time event at the Zoo would encourage visitors to attend during the later opening hours. Although attendance on both evenings was good, and feedback from visitors was positive, the team learned that most families come to Dublin Zoo earlier in the day, and a promotion or event to encourage visitors during the evening hours would be better suited to young adults. At the end of the month, the lively Carnival Weekend was held, with classic carnival games and live entertainment, which included juggling, acrobatics and firejuggling displays.

Science Weekend took place on 10 and 11 August. This event saw three 'Junior Einstein' shows daily, which featured childfriendly experiments and demonstrations, as well as themed crafts. The second SSE 'Eco Explorers Weekend' of the summer took place in August and again was a great success. The event included an interactive 'Pookie Live' experience in the Farmhouse, where Pookie spoke directly to children about sustainability topics. In the run-up to the event, SSE invested in outdoor and online advertising, which in turn promoted Dublin Zoo throughout the summer months. In August also, for the third year in a row, we held the SSE Airtricity Roar and Snore event, in which two lucky families won an overnight glamping experience in Dublin Zoo. Team Leader Eddie O'Brien gave each family a private tour of the Zoo the morning after their stay with some behind-the-scenes experiences. Both nights were a huge success.

During the autumn school mid-term break, a Halloween pumpkin-carving workshop was held in Haughton House with Silly Billy; 226 kids of all ages got creative with pumpkins over two fun-filled days. Finally, in December, small changes to the Santa's Grotto experience improved the queuing system, a gazebo was put up outside the Farmhouse, and buggies were parked there without needing to go through the Grotto. More than 80% of capacity was sold.



CONSERVATION AND SCIENCE: GUIDE TO ACRONYMS

- BIAZA: British and Irish Association of Zoos and Aquariums.
- CSS: Centres for Species Survival; these are partnerships between the IUCN SSC Chair's Office and leading species conservation organisations. They work closely with relevant SSC Specialist Groups to catalyse priority conservation efforts across the IUCN Species Conservation Cycle, at various geographic scales or taxonomic or thematic focuses.
- **EAZA:** European Association of Zoos and Aquaria.
- EAZA Biobank: A collection of frozen biological samples from animals in EAZA zoos and aquariums, and from their wild counterparts; the samples are made available for scientific research to support conservation and population management.
- EAZA Cryopreservation Hub: An organisation working in close collaboration with EAZA to provide cryopreservation services to EAZA members within a country.
- IUCN: International Union for Conservation of Nature; a membership union of government and civil society organisations working together to advance sustainable development and create a just world that values and conserves nature. The IUCN harnesses the knowledge, resources and reach of more than 1,400 member organisations and 17,000 experts. The IUCN is the global authority on the status of the natural world and the measures needed to safeguard it.

- IUCN Red List: The world's most comprehensive information source on the global extinction risk status of animal, fungus and plant species.
- IUCN SSC: IUCN Species Survival Commission; a science-based network of more than 10,000 volunteer experts from almost every country of the world who work independently, and with the different IUCN Units, to build knowledge on the status of species and threats to them, and to provide advice, develop policies and guidelines and facilitate conservation planning.
- NBAP: National Biodiversity Action Plan; Ireland's 4th NBAP sets the national biodiversity agenda for the period 2023–2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature.
- NSSG: National Species Specialist Group; these are IUCN SSC Specialist Groups which aim to bring together efforts at the national level to collaborate in making the best decisions to achieve biodiversity conservation based on the best scientific knowledge available.
- **SSC:** see IUCN SSC above.
- WAZA: World Association of Zoos and Aquariums.
- World Species Congress: A 24-hour, online event showcasing evidence-based conservation strategies, inviting organisations and governments to accelerate their commitments to saving species, and inspire conservationists to amplify success.

CONSERVATION AND SCIENCE

The first full year of the Centre for Species Survival: Ireland (CSS: Ireland), launched in November 2023, was very successful. CSS: Ireland is a hub for Dublin Zoo's conservation work and gives the Zoo greater capacity to contribute to native species conservation assessments, planning and action. In March, senior members of the International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) reviewed the work of the centre to date. This included the Chair of the SSC, Dr Jon Paul Rodríguez, and the IUCN's Director of Strategic Partnerships, Dr Kira Mileham. The IUCN Team was particularly interested in the Zoo's collaborations and partnerships with Irish conservation projects, its excellent engagement with the Irish government on native species conservation, and CSS: Ireland's contributions to the country's fourth National Biodiversity Action Plan (NBAP).

In April, CSS: Ireland hosted the first in-person meeting for all IUCN SSC Specialist Group members in Ireland, with Dr Kira Mileham from the IUCN SSC attending virtually; the meeting was also addressed by Dr Jon Paul Rodríguez. The initiative was a crucial first step in the formation of an IUCN SSC National Species Specialist Group (NSSG), which Dublin Zoo will be supporting once it is fully established. Ireland currently has just over 40 IUCN SSC Specialist Group members, ranging from the Mollusc Specialist Group to the Crocodile Specialist Group. This includes staff at Dublin Zoo, who are represented on the Primate Specialist Group (Director Dr Christoph Schwitzer), Conservation Planning Specialist Group (Dr Schwitzer and General Curator Miguel Bueno), and the Animal Biobanking for Conservation Specialist Group (Senior Conservation and Science Officer Dr Andrew Mooney). The NSSG will connect all IUCN Specialist Group members working in Ireland and thereby mobilise a national network of conservationists. The NSSG will also bridge the gap between on-the-ground conservation efforts and government efforts. Similar groups exist in several countries, including China and Madagascar, and they have been very successful at not only bringing Specialist Group members together, but also bringing in new voices and emerging conservationists.

In October, more than 300 leading conservationists from around the world attended the 5th IUCN SSC Leaders' Meeting in Abu Dhabi to network and plan for species conservation efforts globally. Representing Dublin Zoo and CSS: Ireland, Dr Andrew Mooney and Species Survival Officer Louise Enderby participated in panel discussions and ran workshops, particularly focusing on the Zoo's recent work with the Irish Government as part of Ireland's fourth NBAP. This meeting provided an opportunity to network with leaders of specialist groups around the world and promote ongoing conservation efforts in Ireland. Locally, meetings were held with the IUCN SSC Freshwater Crustacean Specialist Group and BirdWatch Ireland to explore opportunities for conservation and research efforts for white-clawed crayfish (Austropotamobius pallipes) and puffins (Fratercula arctica), respectively.

The first ever World Species Congress, organised by the IUCN, was held as a virtual 24-hour event on 15 May. The IUCN and Reverse the Red were keen for zoos, particularly for those hosting Centres for Species Survival, to contribute to the congress and provide content. Dublin Zoo was one of the organisations from 190 countries or territories participating, and more than 10,000 people registered to take part in this virtual conference. An in-person livestream of the global event was provided for Zoo staff and volunteers. Dublin Zoo presented a selection of videos from Native Species Weekend and hosted a discussion on national planning for native Irish species attended by Ferdia Marnell from the National Parks and Wildlife Service (NPWS). Louise Enderby gave a

presentation on the work of CSS: Ireland. The Minister of State for Nature, Heritage and Electoral Reform, Malcolm Noonan TD, also contributed to the Congress with a short video addressing biodiversity loss in Ireland and the need to conserve native Irish species.

National Conservation Programmes

On 11 and 12 May, the Conservation and Science Team organised and celebrated the return of Native Species Weekend, the first since the Covid lockdown in 2020. Twenty Irish conservation organisations and government bodies gathered in a large marquee where they engaged with many enthusiastic adults and children. Native species conservation efforts that were showcased included Irish honeybees (Apis mellifera mellifera), Natterjack toads (Epidalea calamita) from Fota Wildlife Park, water stick insects (Ranatra linearis) and live Atlantic salmon (Salmo salar). With additional activities run by the Dublin Zoo volunteers, Native Species weekend was a great success. It was followed on Monday 13 May by an equally successful event for schools, which is further discussed in the Conservation Education report. Both were satellite events of the World Species Congress, for which the Conservation and Science Team coordinated Dublin Zoo's contribution.

During the autumn, the Conservation and Science and Conservation Education departments collaborated to bring Dublin Zoo into BIAZA's ongoing 'Spotted on Site' campaign. This campaign monitors the diversity of native wildlife found on BIAZA sites through observations recorded by staff, volunteers and visitors through the iNaturalist app. The app gives the scientific community easy access to wildlife data worldwide.

Dublin Zoo resumed the annual pollinator monitoring

as part of the All-Ireland Pollinator Plan, including both Flower-Insect Time Counts and Bumblebee Monitoring Scheme transects. During spring and summer, Dublin Zoo's Conservation and Science Team collected data for the All-Ireland Bumblebee Monitoring Scheme. By following a twokilometre transect around the Dublin Zoo site at least twice per month between March and October, the team recorded which species they saw, how many, which plants they were favouring, what different types of bees they saw (queens, workers or males) and what the weather was like when they spotted them. The data was sent to the National Biodiversity Data Centre, alongside other citizen science recordings, and is being used as a baseline to help monitor the health of Ireland's bumblebees and to assess the impact of the All-Ireland Pollinator Plan. This work also supports research that demonstrates the effectiveness of planting wildflower meadows in Dublin Zoo, and leaving areas wild to support native biodiversity.



The Conservation and Science and Animal Care teams jointly contributed to a successful funding application under the NPWS's call for proposals for the Breeding Wader European Innovation Partnership (EIP). The project was officially

launched in May in Shannon Harbour, County Offaly, by Minister for Agriculture, Food and the Marine, Charlie McConalogue TD, together with Minister of State for Nature, Heritage and Electoral Reform, Malcolm Noonan TD, and Minister of State for Land Use and Biodiversity, Senator Pippa Hackett. The project will help to protect Ireland's 10 species of breeding wader, the country's most vulnerable group of birds. In Ireland, breeding waders such as the curlew (Numenius arquata), dunlin (Calidris alpina), lapwing (Vanellus vanellus) and golden plover (Pluvialis apricaria), have declined by as much as 98% in recent decades. Overall, the project aims to secure existing wader populations at key sites, and to support population recovery through wider landscape management and policy development. Dublin Zoo and Fota Wildlife Park will play a key role, taking eggs from around Ireland, hatching them, and then releasing the birds back into the wild once they have grown. In the wild, breeding wader eggs are vulnerable to predation by other birds and foxes, so this headstarting initiative will give the



Wildlife Park's previous successes with species such as the corncrake (Crex crex). This €25 million project is funded jointly by the NPWS and the Department of Agriculture, Food and the Marine, under the European Innovation Partnership Agri Programme. EIP projects like this one are locally led schemes, which are designed and implemented by collaborative groups of stakeholders including Irish conservation organisations and universities, and involving farmers, scientists, ecologists and other experts. The project promotes a range of ecosystem services that are of benefit to the whole of society through habitat enhancement and restoration, headstarting, nest protection, predation risk management, agricultural policy and advice, strategic actions, community education and conservation science. In July, Dublin Zoo keeper Louise McDermott and Louise Enderby visited a small croft in Druncong where the Breeding Waders EIP prepared six curlews for release. The birds were fitted with GPS trackers to ensure long-term monitoring postrelease. The curlews remained under care at the release site in Leitrim to ensure they were not affected by the trackers before release back to the wild.

chicks a greater chance of survival. We will build on Fota

International Conservation Programmes

In 2024, Dublin Zoo became the primary funder of Selamatkan Yaki, supporting its activities and providing strategic oversight at an Advisory Board level. Selamatkan Yaki was founded in 2007 and is based in Manado, North Sulawesi, Indonesia. Dublin Zoo has been supporting this organisation since 2010, funding their protected area management and raising awareness of the Critically Endangered Sulawesi crested macaque (or yaki). Today, there are around 5,000 Sulawesi crested macagues left in the wild. Hunting for bushmeat is one of the biggest threats to the species. However, they are also threatened due to

habitat destruction and fragmentation caused by farming and mining activities. This year, Dublin Zoo took over from the Wild Planet Trust as the primary funder for Selamatkan Yaki's activities. The Sulawesi crested macague is a species that has bred very well at Dublin Zoo; and this partnership with Selamatkan Yaki is a huge step in furthering our conservation investment in the species, allowing us to make a significant contribution to their conservation in the wild. Dr Andrew Mooney took part in a capacity building workshop for the Selamatkan Yaki team in Manado in January. Conservationists from Singapore Zoo's parent institution, Mandai Nature, also joined the workshop and talked about creating species conservation plans. In August, following the appointment of a new programme director, the first of regular virtual meetings were held with the Selamatkan Yaki Management Team.

Dublin Zoo has been supporting the Orangutan Foundation since 2015, and in particular the work they are doing in the Lamandau Wildlife Reserve in Borneo. This reserve was established in 1998 from two former logging concessions and is now home to a viable, self-sustaining population of over 600 Bornean orangutans. The Orangutan Foundation has a team of 65 local staff in Lamandau, who monitor the forest and its wildlife, protecting them from illegal activity. In addition to population monitoring and public outreach, the Orangutan Foundation also operates five camps throughout the reserve, where orphaned orangutans learn the skills necessary for a life in the wild. Dublin Zoo's support helps the Orangutan Foundation to care for the orphaned orangutans that are currently part of this programme. In October 2023, they welcomed Logos into their soft release programme. Logos is a two-year old male Bornean orangutan and was rescued in transit to Thailand where he would have been sold as a pet. Logos joins Mona and Adib in soft release at Camp JL and has settled in well, practising his skills for an eventual independent life in the wild. Young orangutan

'Dublin', named in honour of Dublin Zoo's visit to Lamandau Wildlife Reserve in 2017, is fast approaching seven years of age and is now living independently of his mother Dedek. Whilst Dedek was last seen around Camp JL in July 2023, Dublin still regularly appears at the camp alone, showing that he is making his own way in the forest. Interestingly, Dublin was sighted at Camp JL in February this year, around the same time as his sibling Dullah. Dullah, who was born to Dedek in 2009, has not been seen around camp for a long time. The Bornean orangutan is considered Critically Endangered on the IUCN Red List, with approximately 100,000 left in the wild.

Dublin Zoo has been supporting the Red Panda Network since 2014, helping to save red pandas and their habitat across Nepal. Founded in 2007, the Red Panda Network is committed to the conservation of red pandas and their habitat through the education and empowerment of local communities. The dedicated Red Panda Network team monitors and tracks red pandas across more than one million acres of forest in Nepal. In 2007, the Red Panda Network created the world's first community-based red panda population monitoring programme, called the Forest Guardian programme. Dublin Zoo's support for the Red Panda Network allows them to continue developing the Forest Guardian programme. Forest Guardians are local people, often from disadvantaged, rural communities, who are paid to monitor and protect red panda habitat, as well as educate local communities. This programme, which started with only 16 Forest Guardians, now has a national team of over 100 people across Nepal. In 2024, the Red Panda Network trained 26 new Forest Guardians on red panda habitat monitoring, camera trap surveying and forest restoration techniques in Jajarkot, Jumla and Kalikot districts. They have also been working with eight Forest Guardians to create polyhouses for growing organic

vegetables as part of their sustainable livelihoods programme. On International Soil Conservation Day (8 August), Nepal celebrated a significant milestone in wildlife conservation with the declaration of the Puwamajhuwa Community Red Panda Protected Area. Located in Ilam Municipality, this is the first conservation area declared by the local government for red panda conservation, highlighting the government's commitment to the species. The Red Panda Network has partnered with the Ilam Municipality and District Forest Office to create a new ten-member 'Puwamajhuwa Community Red Panda Conservation Area and Management Committee' to sustainably and effectively manage this new conservation area moving forward.

In May, Dublin Zoo launched its participation in the EAZA 'Vietnamazing' campaign and our new partnership with the Asian Turtle Program, which is based in Hanoi, Vietnam. This is to support the conservation of Vietnam's highly threatened turtle species. Dublin Zoo has been supporting the Asian Turtle Program of Indo-Myanmar Conservation since late 2023, helping to fund conservation efforts for the Critically Endangered Vietnamese pond turtle (Mauremys



annamensis) in Cuc Phuong National Park, home to the Asian Turtle Program's Turtle Conservation Center (TCC). The TCC was established in 1998 as a rescue and holding centre for tortoises and freshwater turtles that were confiscated from the illegal wildlife trade. Today, the centre includes specialised breeding and holding facilities for 22 of Vietnam's 26 native tortoise and turtle species; it is caring for a group of over 900 Vietnamese pond turtles, most of which were born at the centre. Dublin Zoo's support has allowed the TCC to construct a 150-square-metre facility for a group of juveniles and sub-adults, with the remainder used to support field activities in central Vietnam. The Vietnamese pond turtle has suffered a 99% reduction in their population size over the last 50 years, primarily due to poaching for sale into the international wildlife trade. The Vietnamese pond turtle is one of 10 species which are being highlighted as part of the new EAZA Campaign, Vietnamazing. This campaign aims to unite conservation efforts, linking institutions, partners, and communities to protect the country's unique species and ecosystems through a comprehensive approach encompassing planning, research, education and fundraising.

September also saw the publication of the IUCN SSC Cercocebus and Mandrillus conservation action plan 2024– 2028, which was made possible in part due to financial support from Dublin Zoo. This includes species such as the white-naped mangabey, which can be seen at Dublin Zoo, and which is highly threatened in the wild. Dublin Zoo was one of 11 European zoos which helped to establish West African Primate Conservation Action (WAPCA) in 2001, and we have been supporting them ever since. WAPCA is a local Non-Government Organisation working in Ghana and Côte d'Ivoire to preserve and protect the threatened primates of West Africa, including the white-naped mangabey, through community empowerment, research, education, and conservation breeding.

53

Research

In 2024, Dublin Zoo was involved in more than 50 research projects, some of which are still ongoing. These projects were in collaboration with 38 different partners and institutions, including 27 universities around the world. They contributed to 12 undergraduate degrees (BA/BSc), 16 master's degrees (MSc/MRes) and six doctoral degrees (PhD). Dublin Zoo also helped co-author, contributed data to, or financially supported, a number of peer-reviewed scientific publications.

Collaboration with Irish universities continued, with students from Queens University Belfast commencing one undergraduate and two postgraduate student placements. Support for several research projects undertaken by undergraduate students from University College Dublin (UCD) was ongoing, including studies looking at animal behaviour and microbiomes. In the autumn, a student from UCD conducted observations on the African spurred tortoise (Centrochelys sulcata) pair Ray and Aby; solarpowered cameras were installed in the indoor and outdoor habitat to capture the tortoises' movements through the day and night, and to look at the effects of enrichment on activity and habitat use. Elsewhere, the Conservation and Science Team conducted a lion and tiger visibility study to explore animal visibility and visitor satisfaction with the lion and tiger habitats at the Zoo. This arose from analysis of visitor feedback concerning how difficult it is to see some of the animals at times. The first part of the study involved carrying out behavioural observations to see where the animals use their habitats and why. The subsequent part was coordination with the Animal Care Team and collaboration with the Volunteer Team to see if natural behaviours could be encouraged in more visible locations. Volunteers were posted at each habitat to offer information on where to see the animals and to share conservation facts.

Dr Andrew Mooney worked with the EAZA Executive Office to better understand the known pedigree of the current citron-crested cockatoo (*Cacatua citrinocristata*) EEP population and has been liaising with several holders to gather information on the origins and demography of priority individuals. In addition to ongoing management of the citron-crested cockatoo EEP, a meeting was held with Kees Groot, a new PhD student at Copenhagen Zoo, who will be working with the EAZA Cockatoo Working Group on mate aggression across all white cockatoo EEPs. A full list of research projects is contained within this report.

In other activities, the Conservation and Science Department continued the public Conservation Lecture Series, with Brandon Farrelly from Dublin Zoo delivering an evening lecture on different conservation strategies and John Andrews from Lincoln Park Zoo, Chicago, USA, giving a talk entitled 'How to manage zoo populations'. Two in-service talks to the Zoo Team were also delivered: Delaney Eng from Mandai Nature, Singapore, on their sustainability practices, and Rory Hennerby from K9 Wildlife Project, Ireland, on his work training dogs for wildlife. Dr Andrew Mooney was invited to become the Co-Vice Chair of the EAZA Cryopreservation Interest Group, and a member of the EAZA Biobank Working Group. Meanwhile, Lucy Rutherford was appointed as Dublin Zoo's first Behaviour and Welfare Scientist. Lucy is working on developing a public-facing Animal Welfare Master Plan for Dublin Zoo, which will detail how the Zoo defines welfare and the approach to achieving welfare goals. Finally, the Conservation and Science Team won the runnerup prize in the 'Research' category of the BIAZA Awards for their recent work looking at flamingo foot health.



DUBLIN ZOO CONSERVATION PARTNERS

Africa

- Giraffe Conservation Foundation (Nubian Giraffe Conservation Working Group), Kenya (Nubian giraffe).
- Lemur Conservation Association (AEECL), Madagascar (several lemur species, including blue-eyed black lemur).
- Mountain Bongo Surveillance Project, Kenya (mountain bongo).
- Okapi Conservation Project, Democratic Republic of the Congo (okapi).
- Painted Dog Conservation, Zimbabwe (African painted dog).
- Re:wild/Swiss Center for Scientific Research in Côte d'Ivoire, Ivory Coast (Miss Waldron's red colobus).
- Save the Rhino (Lowveld Rhino Trust), Zimbabwe (black and white rhinos).
- Scimitar-Horned Oryx Reintroduction Programme, Tunisia (scimitar-horned oryx).
- Tacugama Chimpanzee Sanctuary, Sierra Leone (western chimpanzee).
- West African Primate Conservation Action, Ghana (several primate species, including white-naped mangabey).

Asia

- Asian Turtle Program, Vietnam (Vietnamese pond turtle).
- BirdLife/Burung Indonesia, Sumba, Indonesia (citroncrested cockatoo).
- Orangutan Foundation (Lamandau Wildlife Reserve), Borneo, Indonesia (Bornean orangutan).
- Red Panda Network, Nepal (red panda).
- Save the Rhino (Sumatran Rhino Sanctuary), Sumatra, Indonesia (Sumatran rhino).
- Selamatkan Yaki, Sulawesi, Indonesia (Sulawesi crested macaque).
- Snow Leopard Trust, Central Asian range states (snow leopard).

- WildCats Conservation Alliance, China (Amur tiger and Amur leopard).
- Wildlife Trust of India (Right of Passage: National Elephant Corridors Project), India (Asian elephant).

South America

- Golden Lion Tamarin Association, Brazil (golden lion tamarin).
- Sphenisco, Chile (Humboldt penguin).

Europe

• Proyecto Eremita, Spain (waldrapp ibis).

Ireland

- Bat Rehabilitation Ireland, Limerick (Irish bats).
- BirdWatch Ireland, Ireland (raptors, barn owl).
- Irish Grey Partridge Conservation Trust, Ireland (breeding waders, curlew).
- Irish Peatland Conservation Council, Kildare (marsh fritillary butterfly).
- Kildare Wildlife Rescue, Kildare (Irish wildlife).
- Louth Nature Trust, Louth (little tern).
- Seal Rescue Ireland, Wexford (grey and common seals).

Global

IUCN Conservation Planning Specialist Group.

RESEARCH PROJECTS

Staff-led Research at Dublin Zoo

- All-Ireland Bumblebee Monitoring Scheme (as part of the All-Ireland Pollinator Plan).
- The behavioural and hormonal adaptation of a related herd of Asian elephants to a transatlantic inter-zoo transfer.
- The behavioural and hormonal adaptation of a related herd of Asian elephants to the arrival of a new bull.
- BIAZA Spotted on Site.
- The contributions of EAZA member zoos and aquariums to the in situ and ex situ conservation of European Species.
- Exploring visibility and visitor experience at the lion and tiger habitats at Dublin Zoo.
- · Flamingo feet in Dublin Zoo.
- Flower-insect timed count (as part of the All-Ireland Pollinator Plan).
- Study of aye-aye behaviour in Dublin Zoo.

University-led Research at Dublin Zoo

- Assessing interactions and resource sharing between wild and captive birds in a zoo environment. MSc. Queens University Belfast.
- Automated behaviour classification of endangered red pandas with CNN-based models for conservation efforts.
 MSc. National College of Ireland.
- Behaviour of the Bornean orangutans and siamang gibbons at Dublin Zoo. MSc. Trinity College Dublin.
- Behavioural and spatial ecology of Southern white rhinos: effects of habitat changes, social dynamics, and Corvidae management at Dublin Zoo. MSc. Trinity College Dublin.
- Chemical and microbial analysis of the Flamingo Lagoon water in Dublin Zoo with phytoremediation trials to improve the water quality. BSc. Technical University Dublin.
- Correlations between Southern white rhino behaviour

- and weather or visitor impact. MSc. Queens University Belfast.
- Effect of enrichment on the behaviour of African spurred tortoises. BSc. University College Dublin.
- Elephant diet analysis using metabarcoding. MSc. University College Dublin.
- Future Zoo: an insight into the impact of climate change on visitor attendance. MSc. Trinity College Dublin.
- Giraffe diet analysis using metabarcoding. BSc. University College Dublin.
- Influence of body mass on body temperature in mammals. BA. Trinity College Dublin.
- Interactive platform design: mammal biodiversity and conservation in Ireland. MSc. Griffith College.
- Investigating the impact of introducing a male lion on the daily activity patterns and behaviours of Asiatic lions in captivity. BSc. Trinity College Dublin.
- Microbiological and chemical analysis of sea lion and penguin feed in Dublin Zoo. BSc. Technological University Dublin.
- Microbiome diversity and its correlation with health parameters in captive animals at Dublin Zoo. BSc. University College Dublin.
- Optimising the detection of Southern white rhinoceros through eDNA samples from footprints. BSc. University College Dublin.
- Space usage and behaviours in ring-tailed lemurs. BSc. University College Dublin.
- Testing soil samples for the presence of Toxocara eggs in the snow leopard enclosure of Dublin Zoo. BSc. Munster Technological University.
- Validation of the HACCP plan in the carnivore kitchens in Dublin Zoo. BSc. Technological University Dublin.
- The Zoo and you: how social media marketing influences conservation behaviour. MSc. Trinity College Dublin.

Multi-Institution Research

- Ape Heart Project. Twycross Zoo / EAZA Biobank / University of Nottingham / University of Birmingham.
- The battle of the sex chromosomes: consequences for spermatogenesis and reproduction in primates.
 Copenhagen Zoo / Aarhus University.
- Biometric recognition of individual animals within species from the Felidae family. MSc. University of Ljubljana.
- Caring for wildlife: an analysis of EAZA zoo mission statements and staff perspectives on conservation and animal welfare alignment. MSc. University of Edinburgh.
- A comprehensive assessment of the current landscape of zoos' self-perception and relation to the Illegal Wildlife Trade (IWT) within the European Union (EU). MRes. Leiden University.
- The cooperation between European zoos and EAZA for the conservation of endangered species and specifically Okapia johnstoni. BSc. University College Ghent.
- Creating the brand image through educational activities.
 Good practices and model of communicating the brand image of zoos. PhD. Wroclaw University of Economics.
- Developing a novel personality and welfare tool for use with elephants cared for in zoos. PhD. University of Chester / Chester Zoo.
- Diversity and inclusion in zoos: do adults with hidden disabilities feel supported in BIAZA zoos? BSc. University Centre South Devon.
- EAZA Elephant TAG EEHV Fund. Ongoing. EAZA / Erasmus University Rotterdam / University of Houston.
- Feeding practices and welfare in giraffes under human care. MSc. University of the Free State.
- Genetic variation in wild and captive siamang gibbon populations. Aspinall Foundation.
- Great Ape Gamete Recovery Initiative. EAZA Great Ape TAG / Allwetterzoo Münster.

- Individual variation of delaying gratification in a socially tolerant primate. PhD. University of Portsmouth.
- An investigation into the prevalence and aetiology of regurgitation and reingestion (R/R), coprophagy and hair plucking in great apes in EAZA zoos. MSc. University of Chester.
- Is parasite conservation culturally feasible? PhD.
 University of Leeds.
- Luteinization of granulosa cells for the identification of factors regulating white rhinoceros corpus luteum physiology. Leibniz Institute for Zoo and Wildlife Research.
- Mapping the recombination landscape in scimitar-horned oryx (*Oryx dammah*). University of Edinburgh.
- The Orang-utan Conservation Genetics Project. The Orang-utan Conservation Genetics Project, Inc. / Allwetterzoo Münster.
- Potential of wild animal training (with a focus on handicapped animals). MSc. Czech University of Life Sciences.
- Reducing mate aggression to increase breeding success in captive populations of endangered cockatoos. PhD. Copenhagen Zoo / University of Copenhagen.
- Research on mortality and morbidity within the exsitu population of polar bears (*Ursus maritimus*). Zoo Karlsruhe.
- Rhythmic behaviours in siamangs (*Symphalangus syndactylus*). PhD. University of Turin.
- Use of artificial nests for hornbill conservation. IUCN Hornbill Specialist Group.
- World Archives of Species Perception Project. Hasselt University.

PUBLICATIONS BY DUBLIN ZOO STAFF OR SUPPORTED BY DUBLIN ZOO

(Dublin Zoo staff highlighted in bold font)

Bartlett, A., Brereton, J.E., Freeman, M.S. (2024). A Comparative Multi-Zoo Survey Investigating the Housing and Husbandry of *Callimico goeldii. Journal of Zoological and Botanical Gardens*, 5, 66-79. https://doi.org/10.3390/jzbg5010005. [Dublin Zoo contributed answers to a survey and Susan O'Brien (EEP Coordinator) distributed survey.]

Dempsey, A., Fernández, D., McCabe. G., Abernethy, K., Abwe, E. E., Gonedelé Bi, S., Kivai, S. M., Ngoubangoye, B., Maisels, F., Matsuda Goodwin, R., McGraw, W. S., McLester, E., ter Meulen, T., Oates, J. F., Paddock, C. L., Savvantoglou, A., & Wiafe, E. D. (2024). Cercocebus and Mandrillus conservation action plan 2024-2028. Gland, Switzerland: IUCN. [Dublin Zoo provided financial support for this publication.]

Hoornweg, T.E., Schaftenaar, W., Rutten, V.P.M.G., de Haan, C.A.M. (2024). Low gH/gL (Sub)Species-Specific Antibody Levels Indicate Elephants at Risk of Fatal Elephant Endotheliotropic Herpesvirus Hemorrhagic Disease. *Viruses*, 16, 268. https://doi.org/10.3390/v16020268. [Dublin Zoo provided financial support for this publication through our support for the EAZA Elephant TAG EEHV Fund. Support from various zoos is mentioned in the article.]

McGill, N. (2024). Why is Conservation Medicine Important? *Veterinary Ireland Journal,* 14(4), 150-152.

Mooney, A., Walker, S., Pereboom, Z., & Hvilsom, C. (2024). Unlocking the potential of cryopreservation, *Zooquaria* (123), 15. https://strapi.eaza.net/uploads/ZQ_123_web_c5eab3bacc.pdf.



CONFERENCE ATTENDANCES, PROFESSIONAL VISITS AND VISITORS

January

Director Dr Christoph Schwitzer attended a BIAZA Board meeting at Chester Zoo, UK.

Senior Conservation and Science Officer Dr Andrew Mooney attended a capacity building workshop with Selamatkan Yaki in Manado, Indonesia.

Species Survival Officer Louise Enderby attended the virtual 'Policy Forum for Ireland: Addressing Biodiversity Loss in Ireland'.

Dublin Zoo DEAI working group attended lunch with the Lord Mayor of Dublin, Daithí de Róiste, in the Mansion House.

February

General Curator Miguel Bueno, Marc Enderby and Keeper Albert Pamies attended a BIAZA elephant workshop at Chester Zoo.

Dublin Zoo hosted an 'Introduction to Bat Rehabilitation' workshop in Society House with Bat Rehabilitation Ireland. More than 20 potential bat rehabilitators attended this free event.

Head of Discovery & Learning and IZE Regional Representative for Europe and the Middle East, Aileen Tennant, attended the International Zoo Educators Board Meeting hosted by Wellington Zoo in Harbourside Function Centre, Wellington, New Zealand.

Discovery & Learning Manager and BIAZA Conservation Education Committee (CEC) Regional Representative for Ireland, Niamh Potter, attended a virtual BIAZA CEC meeting. Head of Visitor Operations Mark Bowes and team members Frances Quinn and Pat Kennerk attended Spielwarenmesse, the toy convention in Nuremberg, Germany.

March

Dr Christoph Schwitzer chaired a meeting of the Lemur Conservation Association (AEECL) Board in Provence, France, in his role as President of the Association.

Aileen Tennant attended a two-day in-person EAZA CEC meeting at Lisbon Zoo, focussed on developing EAZA CEC strategy and developing programmes for the EAZA Conservation Education Conference 2025.

Niamh Potter attended an in-person BIAZA CEC meeting at the Natural History Museum in London.

Dr Andrew Mooney delivered a presentation as part of BIAZA's 'Enhancing the image of zoo science: Being valid, open and ethical in research practices' virtual workshop.

Keeper Sarah Byrne attended the Primate Nutrition Conference at Marwell Zoo.

April

Species 360 held its board meeting in Dublin Zoo, with 21 attendees over three days.

WAZA held its Council meeting in Dublin Zoo, with 22 attendees over two days.

Aileen Tennant facilitated a three-hour workshop with the WAZA Council members during the WAZA Council Meeting hosted at Dublin Zoo.

Dr Christoph Schwitzer attended the EAZA Directors' Days

conference at Fota Wildlife Park.

Niamh Potter hosted the BIAZA Regional Conservation Education Meeting for Ireland at Dublin Zoo.

Senior Manager for Local Biodiversity with Mandai Nature in Singapore, Delaney Eng, delivered a lunchtime conservation lecture entitled 'Mandai Nature's biodiversity strategy' in Haughton House. This was part of Dublin Zoo's Conservation Lecture Series for staff.

May

Dr Christoph Schwitzer and Dr Andrew Mooney attended the official launch of the Breeding Waders European Innovation Partnership in Shannon Harbour, Offaly.

John Andrews from Lincoln Park Zoo in Chicago, USA, gave a talk entitled 'How to manage zoo populations' as part of Dublin Zoo's public Conservation Lecture series.

Rory Hennerby from K9 Wildlife Project, Ireland, gave a lecture on his work training dogs for wildlife conservation as part of Dublin Zoo's Conservation Lecture series for staff.

The Conservation and Science Team organised and hosted Native Species Weekend, bringing together more than 20 conservation organisations and government bodies to showcase the work they are doing to conserve native species.

Dr Mooney gave a virtual seminar on cryopreservation as an invited speaker as part of the Leibniz Institute for the Analysis of Biodiversity Change's MEEGene Seminar Series.

Team leader Helen Clarke attended the EAZA Great Ape TAG (GATAG) mid-year conference in Edinburgh.

Team leader Helen Clarke and keeper Alan Duffy went to Fota Wildlife Park to get practical training on cheetah husbandry before bringing one animal to Dublin Zoo.

June

Miguel Bueno and Dr Andrew Mooney attended the first in-person meeting of the Breeding Waders EIP Operational Group in Fota Wildlife Park.

Dr Mooney delivered a presentation on cryopreservation as part of the Microbiology Seminar Series at Trinity College Dublin.

Louise Enderby attended a meeting with the Wildfowl & Wetlands Trust as part of a training exercise for the fitting of GPS trackers to the headstarted curlew.

Dr Christoph Schwitzer attended the BIAZA Annual Conference at Chester Zoo, UK.

Keeper Ken Mackey attended a Rhino Husbandry and Management workshop in Chester Zoo.

July

Louise Enderby attended a crayfish management and research workshop in the UK, hosted by Jen Nightingale (Bristol Zoological Society). This workshop will inform the development of the proposed crayfish hatchery at Dublin Zoo.

The Conservation and Science Team attended the annual BIAZA Research Conference, hosted by Fota Wildlife Park in Cork. More than 60 zoo professionals, academics and students from Ireland, the UK, Lithuania, USA and Japan attended the two-day conference. Dr Andrew Mooney, who is Vice Chair of the BIAZA Research Committee, gave a plenary

on the research potential of zoos, and Louise Enderby gave an update on the new IUCN SSC Centre for Species Survival: Ireland. Behaviour and Welfare Scientist Lucy Rutherford gave a presentation on her work developing a novel personality and welfare tool for elephants in human care. Former Dublin Zoo Conservation and Science Intern Scott Bastow gave a poster presentation on his thesis study looking at the behaviour of Dublin Zoo hippo Heidi. Both Lucy and Scott received awards for highly commended presentations.

The Conservation and Science Team took part in Fota Wildlife Park's Native Species Weekend, which brought together a variety of Irish conservation organisations to showcase what they are doing for native species.

Keeper Susan O'Brien attended the virtual meeting of the EAZA Callitrichid TAG.

August

Dr Andrew Mooney attended a virtual meeting of the Selamatkan Yaki Advisory Board.

Keeper Susan O'Brien undertook work experience on primates and hoofstock, and attended a Browse Management and Silage Production Nutrition workshop in Chester Zoo.

Keepers Alan Duffy and Thomas Munslow attended a workshop on hippopotamus husbandry in Whipsnade Zoo.

September

Dublin Zoo hosted the annual Zoohistorica meeting, with 40 delegates from Europe and North America attending. Participants also visited Fota Wildlife Park.

Dr Schwitzer chaired a virtual meeting of the EAZA European Species Task Force.

Dr Schwitzer attended a virtual meeting of the BIAZA Conservation Directors Group.

Keeper Brendan Walsh attended the University of Reading Bat Conference.

October

Dr Christoph Schwitzer attended a meeting of the Sustainability Leaders Group of leading Irish businesses, hosted by ESB.

Six members of the Dublin Zoo Team (Dr Christoph Schwitzer, Miguel Bueno, Marc Enderby, Dr Andrew Mooney, Louise Enderby and Susan O'Brien) and three members of the Fota Wildlife Park team attended the EAZA Annual Conference in Leipzig Zoo, Germany. Dr Schwitzer and Dr Mooney presented the work of the European Species Task Force at the open and closed meetings of the EAZA Conservation Committee, and Dr Schwitzer assisted the EAZA Nutrition Group with a plenary presentation on the importance of fruit-free diets for primates and chaired a meeting of AEECL, the Lemur Conservation Association.

Dr Andrew Mooney and Louise Enderby attended the fifth IUCN SSC Leaders' Meeting in Abu Dhabi, UAE. Dr Mooney and Louise Enderby facilitated a workshop as part of the Centres for Species Survival Network and contributed to a session on the importance of the network in conservation planning. The team had created a promotional video for CSS: Ireland, which was played during the meeting.

Dr Mooney attended the IUCN SSC CPSG Annual Meeting hosted by Taronga Zoo in Sydney.

Niamh Potter, now Head of Conservation Education in Dublin Zoo, attended the quarterly BIAZA Conservation

Education Committee meeting as Regional Rep for the Island of Ireland region.

Learning Manager Kelly Mara attended the virtual Science Foundation Ireland Curious Minds Network meeting.

Keeper Nicole Mooney accompanied Leki the okapi on the journey to Singapore Zoo to assist the settling-in process.

November

Dr Christoph Schwitzer and Dr Andrew Mooney attended the three-day WAZA Conference in Taronga Zoo, Sydney, Australia, and presented two posters on Dublin Zoo's work with European species and our Sustainability Master Plan. The WAZA Conference focused on the future of zoos to 2050.

Dr Mooney delivered a guest seminar on the transformational conservation role of zoos at the University of Cambridge, UK.

Dublin Zoo Educator Brandon Farrelly delivered an evening lecture in Dublin Zoo's public Conservation Lecture Series in which he spoke about his time with the Sri Lanka Wildlife Conservation Society and with the Marine Dynamics/Dyer Island Conservation Trust in South Africa.

Niamh Potter attended the BIAZA Conservation Education Conference in Flamingo Land.

Dr Mooney attended the Species360 Q4 Biobank Focus Group meeting as Co-Vice Chair of the EAZA Cryopreservation Interest Group. Andrew, with Dr Sue Walker, also drafted official EAZA documents as Co-Vice Chair of the EAZA Cryopreservation Interest Group.

Team leader Helen Clarke and keepers Jade Hanney and

Sarah Byrne attended the Great Ape Workshop in Paignton Zoo.

December

Dr Andrew Mooney attended a meeting of the BIAZA Research Committee, hosted by ZSL London Zoo.

A volunteer trip to Fota Wildlife Park took place, with 31 Dublin Zoo volunteers in attendance. On the day, they met with Park Director and former Head of Discovery & Learning Aileen Tennant, as well as receiving a tour with the education team.

CENSUS OF ANIMALS IN DUBLIN ZOO DURING 2024

Summary of census of animals in Dublin Zoo on 31 December 2024

Taxon	Total Species	Total Specimens
Mammals	33	129
Birds	7	156
Reptiles	16	40
Amphibians	1	1 group
Total vertebrates	57	325
Invertebrates	4	4 colonies

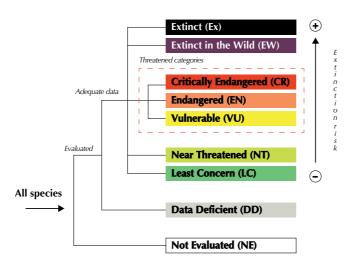
Summary of birth and hatchings of vertebrate animals in Dublin Zoo during 2024

Taxon	Total Species	Total Specimens
Mammals	2	9
Birds	2	8
Reptiles	1	2
Amphibians	1	Multiple in group
Total vertebrates	6	19

Summary of animal taxa on the IUCN Red List of Threatened Species in Dublin Zoo during 2024

IUCN status	Number of species/ subspecies					
Extinct in the Wild – EW	-					
Critically Endangered – CR	10					
Endangered – EN	18					
Vulnerable – VU	12					
Near Threatened – NT	5					
Least Concern – LC	17					
Not Evaluated – NE	4					

Source: IUCN 2021. The IUCN Red List of Threatened Species.



Version 2021-1. https://www.iucnredlist.org

During 2024, Dublin Zoo held 66 non-domestic species/ subspecies, of which 40 (60%) were assessed as being globally threatened, i.e. falling into the IUCN Red List categories from Vulnerable to Extinct in the Wild. A further five species/subspecies fell into the Near Threatened category. The remaining species/subspecies were either of Least Concern (17 species or 26%) or had not been evaluated yet (four species or 6%).

Note – the domestic breeds in Family Farm are not included in these figures.

Summary of species management programmes which Dublin Zoo was part of during 2024

Number of EEPs (EAZA Ex situ Programme)	40	
Number of European studbooks (ESB)	3	
Number of species not part of a managed programme	22	

Key to Census Tables

Part of an EEP (EAZA Ex situ Programme/ European Endangered species Programme).

Recorded in a European studbook.

Column 1: The number of animals in the collection at 1 January 2024.

Column 2: The number of animals received in 2024 through donation, loan or exchange.

Column 3: The number of animals born or hatched during 2024.

Column 4: The number of animals dying within 30 days of birth or hatching, in 2024.

Column 5: The number of animals dying having survived more than 30 days, in 2024.

Column 6: The number of animals leaving the collection through donation, loan, exchange, theft etc. during 2024.

Column 7: The number of animals in the collection at 31st December 2024.

64

The first figure indicates the male numbers, the second female numbers, and the third unsexed numbers, e.g. 1.2.4 reads 1 male, 2 females and 4 unsexed specimens.

Male	Female	Unknown
O ¹	Q	?

This census does not include animals which have been sent on loan to other collections, nor does it include wild animals living within the zoo, e.g. many native bird species.

	CITES	IUCN Status			Total at 01.01.24	Arrivals	Births	Deaths within 30 Days	Deaths	Departures	Total at 31.12.24
			VERTEBRATES	VERTEBRATA							
			CLASS: MAMMALS	MAMMALIA							
			PRIMATES	PRIMATES							
100	I/A	EN	Ring-tailed lemur	Lemur catta	5. 1. 0				1. 0. 0		4. 1. 0
100	I/A	CR	Red ruffed lemur	Varecia rubra	3. 4. 0					2. 0. 0	1. 4. 0
100	I/A	VU	Goeldi's monkey	Callimico goeldii	1. 1. 0						1. 1. 0
100	I/A	EN	Golden lion tamarin	Leontopithecus rosalia	1. 0. 0				1. 0. 0		0. 0 .0
100	II/B	LC	Bolivian squirrel monkey	Saimiri boliviensis boliviensis	4. 0. 0						4. 0. 0
8	II/B	LC	White-faced saki	Pithecia pithecia	3. 1. 0						3. 1. 0
***	II/B	VU	White-naped mangabey	Cercocebus lunulatus	2. 5. 1						3. 5. 0
10	II/B	EN	Red-capped mangabey	Cercocebus torquatus	2. 0. 0					2. 0. 0	0. 0. 0
100	II/B	CR	Sulawesi crested macaque	Macaca nigra	14. 7. 0				0. 2. 0	1. 1 .0	13. 4. 0

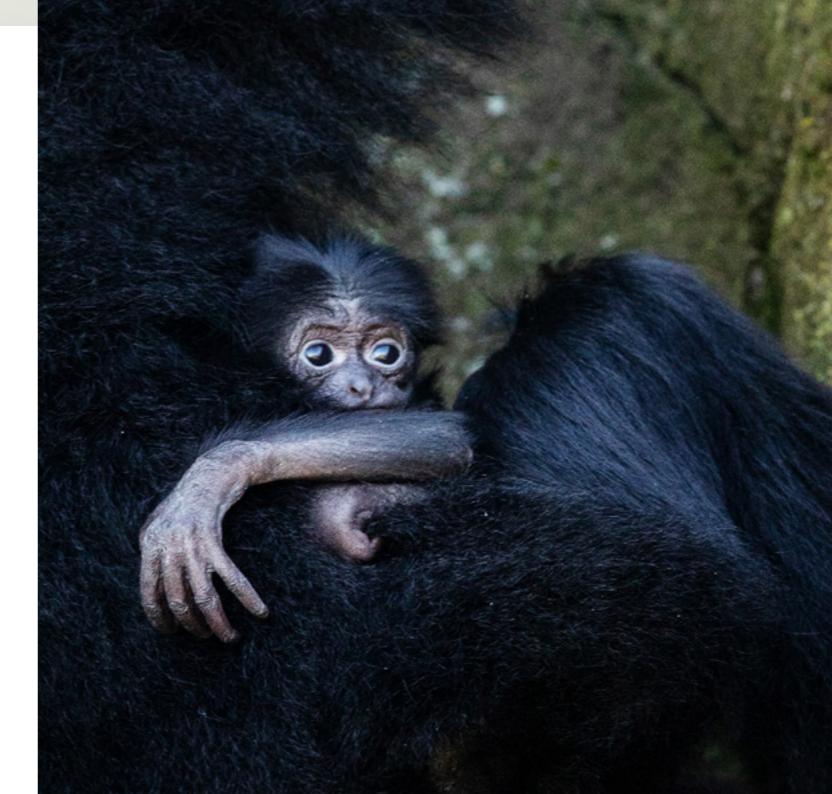
	CITES	IUCN Status	SPECIES		Total at 01.01.24	Arrivals	Births	Deaths within 30 Days	Deaths	Departures	Total at 31.12.24
10	I/A	EN	Siamang	Symphalangus syndactylus	1. 1. 1			,			2. 1. 0
100	I/A	CR	Western lowland gorilla	Gorilla gorilla	2. 4. 0						2. 4. 0
100	I/A	EN	Chimpanzee	Pan troglodytes	3. 3. 0				0. 1. 0		3. 2. 0
101	I/A	CR	Bornean orangutan	Pongo pygmaeus pygmaeus	1.3.0		1. 0. 0		1. 1. 0	1. 0. 0	0. 2. 0
	II/B	NT	Venezuelan red howler	Alouatta seniculus	2. 0. 0				1.0.0		1. 0. 0
iii	I/A	EN	Aye aye	Daubentonia madagascariensis	2. 1. 1						3. 1. 0
			XENARTHRANS	XENARTHRA							
ESB	NL	LC	Linne's two-toed sloth	Choloepus didactylus	1. 1. 0						1. 1. 0
			CARNIVORES	CARNIVORA							
iii	II/A	LC	Grey wolf	Canis lupus	6. 1. 0				1. 1. 0		5. 0. 0
	NL	EN	Painted dog	Lycaon pictus	1. 1. 0				1. 1. 0		0. 0. 0
iii	I/A	EN	Red panda	Ailurus fulgens fulgens	1. 4. 0						1. 4. 0
î	NL	LC	Slender-tailed meerkat	Suricata suricatta	4. 0. 0				1. 0. 0		3. 0. 0
6	I/A	EN	Asian lion	Panthera leo persica	0. 3. 0	1. 0. 0					1. 3. 0
62	I/A	EN	Amur tiger	Panthera tigris altaica	1. 1. 0				0. 1. 0		1. 0. 0
ñ	I/A	VU	Snow leopard	Panthera uncia	1. 1. 0						1. 1. (
ñ	NL	LC	California sea lion	Zalophus californianus	3. 3. 0				3. 0. 0		0.3.0
in.	II/B	EN	Chinese dhole	Cuon alpinus lepturus	5. 0. 0						5. 0. 0
iii	I/A	VU	Northeast African cheetah	Acinonyx jubatus soemmeringii	0. 0. 0	0. 1. 0					0. 1. 0
			ELEPHANTS	PROBOSCIDAE							
iii	I/A	EN	Asian elephant	Elephas maximus	0. 5. 0	1. 0. 0			0. 2. 0		1. 3. 0
			ODD-TOED UNGULATES	PERISSODACTYLA							
	NL	NT	Grant's zebra	Equus quagga boehmi	2. 4. 0				1. 0. 0		1. 4. 0
ñ	II/B	VU	South American tapir	Tapirus terrestris	0. 2. 0						0. 2. 0
100	I/A	NT	Southern white rhinoceros	Ceratotherium simum simum	1. 5. 0						1. 5. (

	CITES	IUCN Status	SPECIES		Total at 01.01.24	Arrivals	Births	Deaths within 30 Days	Deaths	Departures	Total at 31.12.24
			EVEN-TOED UNGULATES	CETARTIODACTYLA							
100	NL	LC	Red river hog	Potamochoerus porcus	3. 0. 0				1. 0. 0		2. 0. 0
100	II/B	VU	Hippopotamus	Hippopotamus amphibius	0.1.0	1. 1. 0			1. 0. 0		0. 2. 0
100	II/B	VU	Giraffe	Giraffa camelopardalis	4. 3. 0						4. 3. 0
100	NL	EN	Okapi	Okapia johnstoni	2. 1. 0					1. 0. 0	1. 1. 0
	III/C	LC	Blackbuck	Antilope cervicapra	0. 1. 0				0.1.0		0. 0. 0
100	NL	CR	Eastern bongo	Tragelaphus eurycerus isaaci	0.1.0	0.1.0					0. 2. 0
100	I/A	EN	Scimitar-horned oryx	Oryx dammah	1. 5. 0					1. 0. 0	0. 5. 0
			DOMESTIC								
			Tamworth pig	Sus scrofa scrofa tamworth	1. 1. 0	1.0.0	2. 4. 2	0. 1. 2		3. 4. 0	1. 0. 0
			Friesian cow	Bos taurus taurus friesian	0. 1. 0						0. 1. 0
			Kerry cow	Bos taurus taurus kerry	0. 1. 0	0. 2. 0				0. 1. 0	0. 2. 0
			Small East African goat	Capra hircus domestic small_east_ african	0. 3. 0	2. 0. 0			0. 1. 0		2. 2. 0
			Domestic Sheep	Ovis aries	0. 2. 0	1.5.0				1. 2. 0	0. 5. 0
	NL	NT	European rabbit	Oryctolagus cuniculus	2. 0. 0						2. 0. 0
			CLASS: BIRDS	AVES							
			PENGUINS	SPHENISCIFORMES							
60	I/A	VU	Humboldt penguin	Spheniscus humboldti	9. 7. 0		2. 0. 3	0. 0. 3			11. 7. 0
			HERONS/STORKS	CICONIIFORMES							
102	I/A	EN	Waldrapp ibis	Geronticus eremita	13. 15. 1				0. 2. 0		13. 13. 1
			FLAMINGOS	PHOENICPTERIFORMES							
	II/B	NT	Chilean flamingo	Phoenicopterus chilensis	55. 42. 0				1. 0. 0		54. 42. 0

	CITES	IUCN Status	SPECIES		Total at 01.01.24	Arrivals	Births	Deaths within 30 Days	Deaths	Departures	Total at 31.12.24
			GALLINACEOUS BIRDS	GALLIFORMES							
	/C	LC	Common peafowl	Pavo cristatus	1.3.0		1. 1. 1		0. 2. 1		2. 2. 0
	NL	VU	Crested wood partridge	Rollulus rouloul	2. 0. 0				1. 0. 0		1. 0. 0
			PARROTS	PSITTACIFORMES							
102	I/A	CR	Citron-crested cockatoo	Cacatua sulphurea citrinocristata	1.3.0						1.3.0
			HORNBILLS ETC.	CORACIIFORMES							
in.	NL	VU	Abyssinian ground hornbill	Bucorvus abyssinicus	1. 1. 0						1. 1. 0
			DOMESTIC FOWL Indian runner duck	Anas platurbunchas damastis							
	NL	NE	indian runner duck	Anas platyrhynchos domestic indian_runner	1. 5. 0						1. 5. 0
			CLASS: REPTILES	REPTILIA							
			CHELONES	TESTUDINES							
107	I/A	CR	Annam pond turtle	Mauremys annamensis	2. 2. 8				0. 0. 1		2. 2. 7
	III/C	CR	Chinese stripe-necked turtle	Mauremys sinensis	1. 0. 0						1. 0. 0
	NL	NE	Central America wood turtle	Rhinoclemmys pulcherrima manni	0. 2. 0						0. 2. 0
	II/B	NE	Red-footed tortoise	Chelonoidis carbonaria	0.3.0						0.3.0
102	I/A	VU	Indian star tortoise	Geochelone elegans	0. 2. 4						0. 2. 4
102	II/B	EN	African spurred tortoise	Centrochelys sulcata	1. 1. 0						1. 1. 0
			CROCODILES	CROCODILIA							
	NL	LC	West African crocodile	Crocodylus suchus	1.1.0						1. 1. 0

	CITES	IUCN Status	SPECIES		Total at 01.01.24	Arrivals	Births	Deaths within 30 Days	Deaths	Departures	Total at 31.12.24
			LIZARDS	SAURIA							
	NL	LC	Green crested lizard	Bronchocela cristatella	4. 0. 0				1. 0. 0		3. 0. 0
	II/B	LC	Panther chameleon	Furcifer pardalis	1. 0. 0				1. 0. 0		0. 0. 0
ESB	I/A	CR	Turquoise dwarf gecko	Lygodactylus williamsi	1. 0. 0	0. 1. 0		1. 0. 0			0. 1. 0
ESB	I/A	EN	Lau banded iguana	Brachylophus fasciatus	1. 0. 0						1. 0 .0
			SNAKES	SERPENTES							
	II/B	LC	Green tree python	Morelia viridis	1. 0. 0						1. 0. 0
	II/B	VU	Burmese python	Python bivittatus	2. 0. 0						2. 0. 0
	II/B	NT	Royal python	Python regius	0. 0. 2						0. 0. 2
	/D	LC	King ratsnake	Elaphe carinata	1. 1. 0		0. 0. 2			0. 1. 2	1. 0. 0
	NL	LC	Cornsnake	Pantherophis guttatus	0. 0. 1						0. 0. 1
	NL	LC	Viperine snake	Natrix maura	0. 0. 1						0. 0. 1
			CLASS: AMPHIBIANS	АМРНІВІА							
			FROGS	ANURA							
			Phantasmal poison dart	Epipedobates tricolor							
	II/B	EN	frog		0. 0. 0	1 Group					1 Group
			INVERTEBRATES	INVERTEBRATA							
			III VERILDIA II E	II V EKI EDIO (II) (
			CLASS: INSECTS	INSECTA							
			STICK INSECTS	PHASMATOPTERA							
	NL	NE	Indian green stick insect	Carausius morosus	1 colony						1 colony
	NL	LC	Macleays spectre	Extatosoma tiaratum	1 colony						1 colony
	NL	CR	Black beauty stick insect	Peruphasma schultei	1 colony						1 colony
	NL	NE	Zompro's/Thai stick insect	Parapachymorpha zomproi	1 colony						1 colony

* approximate numbers



FOTA WILDLIFE PARK: DIRECTOR'S REPORT

Visitor attendance to Fota Wildlife Park for 2024 totalled 428,745, representing a slight decrease of 0.3% from 2023's 430,024 visitation. This year, seasonal fluctuations were pronounced due to the early timing of Easter, resulting in 24,741 visitors in March (52% increase from 16,292 in 2023), while April declined to 36,686 visitors (29% decrease from 51,461 in 2023). Visitation performance remained strong from June to September, and the overall annual attendance demonstrates continued robust visitor engagement despite seasonal timing variations.

PARK ACTIVITIES AND DEVELOPMENTS



Sean McKeown retired as Fota Wildlife Park director after 28 years of distinguished service spanning two separate periods: from 1982 to 1995 and from 2009 to 2024. His leadership transformed the Park from an undeveloped parcel of land leased from University College Cork into an internationally recognised zoological facility with substantial regional economic impact.

The staff, the Board of Governors, and the Zoological Society of Ireland Board formally acknowledge Mr McKeown's

exceptional service and dedication. Through his unwavering commitment, Fota Wildlife Park has emerged as both a leading conservation organisation and a much-loved family destination. The Board of Governors and staff express their sincere gratitude for his leadership and lasting legacy.

The chairman of the Board of Governors and a subcommittee conducted the succession and recruitment process.

CAPITAL INVESTMENT PROGRAMME

On 28 June 2024, the Board of Governors marked a pivotal moment in the history of Fota Wildlife Park with the official opening of the Education, Conservation and Research Centre (ECRC), a €5.5 million facility co-funded by the Irish government via the Office of Public Works (OPW) (€2 million) and the Park (€3.5 million). The ECRC features a 265-seater auditorium, a state-of-the-art boardroom, three classrooms and a spacious atrium for hosting large events. A dedicated research centre is located on the upper floor above the café and education offices, which will provide educational and research opportunities for both undergraduate and postgraduate students in the future.





The opening ceremony was attended by the ZSI Board and Fota Wildlife Park Board of Governors, senior management team and incoming director Aileen Tennant. They were joined by distinguished government representatives including Michael McGrath TD; Minister of State for the OPW Kieran O'Donnell TD; Minister of State for Nature, Heritage and Electoral Reform Malcolm Noonan TD; and Chairman of the OPW John Conlon. Local representation included County Cork Mayor, Councillor Joe Carroll, Cobh and Harbour Chamber President Toddy Stafford, and Cork Chamber President Rob Horgan. This landmark achievement represented Sean McKeown's final significant project before his retirement on June 30. Under his leadership, Sean brought this transformative initiative to fruition, cementing conservation, education, and research as the enduring foundation of Fota Wildlife Park's mission for generations to come.

The strategic capital investment programme advanced significantly in 2024, bolstered by continued government funding through the OPW. This financial partnership, sustained since 2021, has enabled Fota Wildlife Park to implement critical infrastructure improvements, enhancing both operational efficiency and animal welfare standards.

A cornerstone achievement of the capital investment programme was the installation of 1,112 m² of photovoltaic solar panels on the administration and entrance buildings and on the giraffe house. The programme establishes substantial renewable energy generation capacity for the Park's most energy-intensive facilities. This investment aligns with both environmental sustainability goals and long-term operational cost reduction strategies for Fota Wildlife Park.

The programme's most technically challenging project involved the comprehensive retrofit of the giraffe house to



ensure optimal thermal efficiency during the winter months. Facing an exceptionally competitive construction market, the senior management team implemented a cost-control approach through direct in-house project oversight. This was a complex undertaking which required careful planning to minimise the impact on animal care operations for the Rothschild's giraffe herd and to accommodate daily animal movements as well as access to the animal kitchens to the rear of the building throughout the construction phase.





November marked the successful completion and opening of the sophisticated new café facility, strategically designed to complement the ECRC while enhancing visitor amenities. This project was self-funded.



Progress on other capital works included the design and foundation work for the Siamang gibbon house, with construction scheduled for completion in 2025.

COMMERCIAL OPERATIONS

CYBER SECURITY INCIDENT

In late August, Fota Wildlife Park experienced a significant cyber security incident affecting its digital infrastructure. Upon discovery of unauthorised activity on the organisation's website, potentially impacting customer personal details and payment data, immediate action was taken to mitigate risk, including the suspension of website functionality and all online purchasing operations.

Senior management, with oversight from the Board of Governors, initiated appropriate crisis management protocols and coordinated an incident response team, which engaged promptly with several external professionals including cyber security experts and the National Cyber Security Centre. The incident required substantial allocation of governance and senior management resources to ensure protection of stakeholder data, regulatory compliance with reporting requirements, maintenance of business continuity for core operations, effective communication with affected parties, and implementation of enhanced security measures. A comprehensive forensic analysis was conducted to determine the scope and impact of the breach. By October, remediation efforts culminated in the deployment of a newly built informational website and preparation to engage with a new ecommerce platform.

VISITOR SURVEY

Fota Wildlife Park has conducted its sixth consecutive visitor exit survey since 2019. This acts as a barometer for measuring customer satisfaction and to provide the Park with insights for future planning. The survey, undertaken by IPSOS/Behaviour and Attitudes, indicated that, in 2024, visitor satisfaction remained very strong with 95% of those surveyed rating their experience as excellent or very good, and over 75% stating that they were very likely to return. There was an increase in the number of foreign and first-time visitors as compared to 2023 as well as an increase in ABC1 socio-economic demographic and visitors without children. Key reasons for intentions to visit were the liking of Fota Wildlife Park and of wildlife in general. Media engagement among visitors was up, with online newspapers now three times more accessed than print.

RETAIL PERFORMANCE

Fota Wildlife Park continuously enhanced its retail offering by introducing new products, focusing on merchandising, vibrant display and a diverse selection of value items to meet visitors' wide interests. 2024 saw a 0.7% increase in turnover compared to 2023, which was considered positive given the slight decrease in overall visitor numbers.

CATERING OPERATIONS

The Savannah Café operations were strategically relocated in November from their previous position by the main gift shop to the Park-side entry to the ECRC. This move provides expanded cold food storage capabilities and a more spacious food preparation area that has enabled our culinary team to deliver a more diverse menu selection while improving capacity to service ECRC functions. Kudos Catering continues to manage these operations to meet the expectations of our discerning clientele.

Additional catering outlets included Dinky Donuts (mini donuts), Volcano Pizza (wood-fired pizza), and Badger & Dodo (artisan coffee), which are all located at the Mu Cang Chai covered picnic area, serving visitors on weekends and peak summer season from March to September/October. All three are very popular with visitors.

ANIMAL CARE

Fota Wildlife Park celebrated several notable births in 2024, including a female black-and-white colobus (*Colobus guereza kikuyuensis*) and an agile gibbon (*Hylobates agilis*) in January. The Park welcomed six ring-tailed lemurs (*Lemur catta*) in March to four different mothers, two being twin births and the other two single births. Sadly, one of the twins was weak at birth and died soon afterwards. The remaining five are thriving as public favourites.

As members of the European Association of Zoos and Aquariums (EAZA), Fota Wildlife Park participates in European Endangered Species Breeding Programmes (EEPs) and so, throughout the year, engaged in animal exchanges.

February saw the transport of two Northern cheetahs (Acinonyx jubatus soemmeringii) and a roloway monkey (Cercopithecus roloway) to France, with two Northern cheetahs returning to Fota Wildlife Park. A genetically valuable European bison (Bison bonasus) bull arrived from Sweden to strengthen the breeding programme.

April brought the birth of a Linne's two-toed sloth (*Choloepus didactylus*) in the Tropical House. The same month, the male Indian rhino (*Rhinoceros unicornis*) 'Shusto' was transferred to Zoo-Fasano in Italy. In May, a male red panda (*Ailurus fulgens fulgens*) was transferred to Warsaw Zoo in Poland while a female was transferred to Planckendael Zoo in Mechelen, Belgium. Two mountain chicken frogs (*Leptodactylus fallax*) arrived from Norden's Ark in Sweden and our female Northern cheetah 'Cali' was transferred to Dublin Zoo in July.

June marked a significant conservation achievement with the birth of three healthy male Asian lion cubs (*Panthera leo persica*) to female Asian lion 'Arya' and resident male 'Yali'. Arya was born in Fota Wildlife Park and spent a number of years in Korkeasaari Zoo (Helsinki) before returning to Fota Wildlife Park in 2023. The cubs have formed strong familial bonds and have become a highlight for visitors.

Fota Wildlife Park strengthened its white-tailed sea eagle (*Haliaeetus albicilla*) conservation programme with the arrival of a four-year-old male from Ostrava Zoo in the Czech Republic, joining the resident 15-year-old female as part of an EEP breeding recommendation.

Another notable arrival to the Park was 'Dao,' a male Sumatran tiger (*Panthera tigris sumatrae*), from Krefeld Zoo in Germany. Dao was introduced as part of a breeding recommendation which we anticipate will have a good





outcome in the coming year.

Throughout
the year, the
dedicated
animal care
team provided
excellent welfare
management
using animal
welfare
assessment tools
to ensure the
highest of health
and welfare

standards for the animals at Fota Wildlife Park.

CONSERVATION

During 2024, Fota Wildlife Park continued to expand its work with ex-situ and in-situ conservation projects in line with the International Union for Conservation of Nature (IUCN)'s One Plan approach. The Park also continues to deliver on a broad range of Irish native species conservation projects including the conservation of the curlew (*Numenius arquata*), natterjack toad (*Bufo calamita*), white-clawed crayfish (*Austropotamobius pallipes*), white-tailed sea eagle (*Haliaeetus albicilla*) and corncrake (*Crex crex*). Additional nesting areas have been created for the barn owl (*Tyto alba*), long eared owl (*Asio otus*) and kingfisher (*Alcedo atthis*). Survey and ringing projects have been started by staff for moorhen (*Gallinula chloropus*), grey heron (*Ardea cinerea*) and little egrets (*Egretta garzetta*) to determine population status.

In January, Fota Wildlife Park signed an Operational Group Agreement as a partner in the Breeding Waders European Innovation Project (EIP), which forms part of the Common Agricultural Programme Strategic Plan for 2023-2027. Fota Wildlife Park's role is to act as the main head-starter site to incubate, hatch and rear hatchlings to release stage for ground nesting waders in Ireland. This project will include the following wader species: curlew, dunlin, golden plover, lapwing, redshank and snipe, some of which have seen population declines of 98% in Ireland. This EIP project is funded by the EU and overseen by the National Parks and Wildlife Services (NPWS) and the Department of Agriculture with Irish Rural Link as the lead partner assisted by seven other partners including Fota Wildlife Park.



CURLEW

In 2024, a total of 38 curlew eggs were received from ten nests. Of these, eight clutches (32 eggs) were from head starting nests and two nests (six eggs) were from abandoned nests. 29 of the eggs hatched with 26 chicks returned to their natal sites for release. The Breeding Waders EIP placed a leg loop harness with GPS tags on each of the five birds. This was conducted as a training exercise for ringers in Ireland with one of Fota Wildlife Park's rangers participating in the training programme along with colleagues from the NPWS.

NATTERJACK TOADS

Fota Wildlife Park has been involved with natterjack toad conservation since 2016. Continuing with this long-term project saw a 25% increase in the number of toadlets released (2,300) into the Maharees release sites in County Kerry in 2024. To date, Fota Wildlife Park has released more than 11,300 toadlets, making a significant contribution to the conservation of this endangered species in Ireland.

CORNCRAKES

While there were no notable releases of captive reared corncrake, Fota Wildlife Park continued its involvement as an Associated Beneficiary (AB) for the Corncrake Life Project in 2024. In this role, Fota Wildlife Park leads in the rescue and rehabilitation of corncrakes.

WHITE-CLAWED CRAYFISH

The white-clawed crayfish is native to Western Europe and can be found in 18 European territories including the Balkans, Austria, Italy, Spain, the UK and Ireland. Today, Ireland holds some of Europe's most important populations of this endangered species. In October, Fota Wildlife Park was approached by the NPWS to assist a multi-agency team in the rescue and rearing of the native, white-clawed crayfish from a feeder stream of the Blackwater River Special Area of Conservation. Continual monitoring of the spread of crayfish plague suggested that the river in question was facing imminent threat of contamination. A total of 164 white-clawed crayfish were collected by a multi-agency team and moved to specifically designed holding tanks within Fota

Wildlife Park's native species area. This was an important rescue initiative, and plans are underway to commence a breeding programme for this species at Fota Wildlife Park.

ZOO LICENCE

The annual zoological license inspection took place in October and resulted in an exemplary report with no conditions or recommendations issued. This is a testament to the Park's animal care and husbandry excellence, and compliance standards.

EDUCATION

In 2024, Fota Wildlife Park significantly enhanced its educational offerings and public engagement through the inauguration of the sustainably built ECRC. This year, the education department hosted 17,292 students through its formal education programmes, providing learning opportunities across a wide range of age groups. The most popular modules were the second level practical field ecology module and the primary level conservation module, which together welcomed almost 12,000 students. These modules delved into key topics such as ecological science, biodiversity and sustainable environmental practices. The second level ecology module alone accounted for over 5,788 students, while the primary level conservation module was attended by more than 6,200 students. Additional specialised courses included the Junior Cycle Biodiversity Conservation Module (over 600 students), Business Module for Junior Cycle and Leaving Certificate students (544 attendees), and Adult Corporate Education Tours (circa 100 participants).

During the summer, Fota Wildlife Park hosted a series of educational weekends aimed at engaging the public and promoting biodiversity awareness. These events, held in the



newly opened ECRC, were free with Park entry and included the Mad Scientist Weekend (13-14 July), Native Species Weekend (27-28 July) and Bug Bonanza Weekend (17-18 August).

On 9 November, Fota Wildlife Park hosted its first Concert for Conservation in the auditorium of the ECRC. The event featured Cascade Strings, a Cork-based quartet, performing classical interpretations of feline-themed songs. Profits generated from the event were used to support the Wildcats Conservation Alliance's work with Amur leopards and tigers, as well as Fota's ex situ breeding programmes for Asian lions, Sumatran tigers, and Northern cheetahs. The event was well



In June, Fota Wildlife Park's education department collaborated with TELUS International for their "TELUS Day of Giving" programme. In excess of 100 TELUS employees

from Cork, Mayo, and Dublin offices volunteered their time to develop a "serenity garden" for native wildlife at Fota Wildlife Park.

RESEARCH

Fota Wildlife Park continued to work with the School of Biological, Earth and Environmental Sciences (BEES), University College Cork, in the fields of animal behaviour, environmental enrichment, population biology and ecology. Staff members also conducted research at the Park as part of their studies with Sparsholt College in the UK.

Staff Led Research – Sparsholt College Higher Certificate

- Interactions between captive Humboldt penguins and their keepers.
- Does a castrated male European bison (Bison bonasus) still hold dominance when challenged by a younger intact male?
- Enclosure usage of a "Free Roaming" green iguana (*Iguana* iguana).

Undergraduate degree

- Monitoring a fragile truce: assessing the stability of an established dominance hierarchy among a small, captive pride of Asiatic lions at Fota Wildlife Park.
- Bison research.

Master's degree

- Behaviour and habitat use of wallabies in autumn/winter.
- Behaviour of drills.
- Anticipatory behaviour of felids.

Postgraduate degrees undertaken at Fota Wildlife Park

 *Developing a habitat restoration framework with respect to the optimum reference condition for efficient

- enhancement of the conservation measures focusing on the Asiatic cheetah and the Persian leopard in Iran. Commenced: January 2024.
- *Improving animal welfare through environmental enrichment: creating practical enrichment assessment for use in zoos. Commenced: March 2022.

Doctoral degree (PhD)

- *An investigation into how conservation strategies, employed both in captive and wild settings, inform our understanding of animals' movement and behaviour.
 Commenced: September 2021.
- Behaviour of the black and white ruffed lemurs.
 Commenced: September 2023.

*The research work undertaken at Fota Wildlife Park would not have been possible without the valuable co-funding provided by the Irish Research Council (IRC). The IRC provided two thirds of the funding and Fota Wildlife Park provided the remaining third of the funding for these three research projects.

Research Collaborations

- Moorhen re-trapping Adults for Survival (RAS). British Trust for Ornithology.
- Understanding factors that contribute to reproductive success in managed tiger breeding programmes within European zoos. Chester Zoo.
- Non-invasive investigation of faecal glucocorticoid metabolites (fGCM) in male and female giraffe. Chester Zoo.
- Grey heron ringing in Fota Wildlife Park. National Parks and Wildlife Services (NPWS).

CONTINUING PROFESSIONAL DEVELOPMENT (CPD)/TRAINING

In March, senior ranger Caitríona Ní Scanaill attended the BIAZA (British and Irish Association of Zoos and Aquariums) Nutrition Conference in Marwell Zoo. During 2024, two rangers completed the Diploma in Management of Zoo and Aquaria Animals (DMZAA) with a further three animal care staff enrolling in the programme.

Fota Wildlife Park hosted the EAZA Directors Days Conference in the ECRC from 23 to 26 April. Park Director Sean McKeown was host and in attendance for the duration of the event.

Fota Wildlife Park hosted the BIAZA Annual Research Conference from 1 to 3 July with 100 delegates attending in person and online. BIAZA Committee Member and Animal Care Manager Declan O'Donovan played a key role in hosting the conference.

In September, Fota Wildlife Park hosted two CPD days sponsored by NPWS covering Enrichment and Training on the first day, and Conservation, Education and Research on the second day. Attendance at the two days was offered to all licenced zoological facilities in the Republic of Ireland. As a follow up to the two days, our postdoctoral researcher, Dr Rebecca Newman, visited a number of these facilities to assist with their animal enrichment plans and to develop research programmes where these were requested.

Park Director Aileen Tennant, Animal Care Manager Declan O'Donovan and Registrar John McLaughlin attended the EAZA Annual Conference hosted in Leipzig Zoo from 8 to 12 October.



In October, three staff members participated in the Department of Agriculture Small Animal Transport course which gives Fota Wildlife Park the flexibility to transport our animals within Europe and the UK.

MARKETING

The strategic marketing plan for Fota Wildlife Park's new Education, Conservation and Research Centre was devised to establish its presence as a leading educational centre and facility for corporate functions in the south of Ireland. There was positive pick up with many corporate events and conferences being hosted. A marketing plan of the new centre for schools was also devised.

Public Relations

Throughout early 2024, Fota Wildlife Park maintained a strong public relations presence, reinforcing positive messaging through successful breeding programmes such as the birth of the colobus monkey, meerkats and ring-tailed lemurs. The year saw significant media coverage, resulting in a total advertising media value of €5.6 million.

One of the most high-profile announcements occurred in early July with the birth of the three male Asian lion cubs, generating an estimated advertising value equivalency of €289k across print, online, and broadcast editorial, with a reach of 18 million people. On social media, the lion cub reel on Fota Wildlife Park's Facebook page garnered an impressive two million views.

In the latter part of the year the usual marketing and PR activities for the Park were paused as all resources were focused on dealing with the criminal cyber-attack and rebuilding a new website for Fota Wildlife Park.

Community Engagement & Awards

- September 2024: Fota Wildlife Park participated in the Red FM Mini Heroes Awards, sponsoring prizes for deserving families. The competition, which ran from 9 September for two weeks, was heavily promoted on air, highlighting Fota Wildlife Park's commitment to community engagement.
- November 2024: The Park received nominations for Best Use of TikTok and X at the Cork Digital Marketing Awards, recognising its strong digital engagement.
- December 2024: On 28 November, Fota Wildlife
 Park was honoured at the Cork Convention Bureau
 Ambassador Awards 2024 for its role in bringing the
 EAZA Director's Days Conference to the ECRC in April.

EVENTS

With the opening of the ECRC the potential to host events at Fota Wildlife Park greatly increased.

'Waste not, Want Not' Conference

The ECRC in Fota Wildlife Park hosted its inaugural conference, the 'Waste not, Want Not' conference on 31 January 2024. The conference was organised by the tourism organisation, Visit Cork, in collaboration with Cork County Council and Cork City Council and a total of 266 delegates were in attendance. The conference was aimed at the hotel and hospitality sector to inform the various companies on how to reduce food waste, particularly in the production of meals. The meal provided on the day, a lentil curry, was presented in a single ceramic bowl and a spoon showcasing ways to minimise waste in catering.

European Association of Zoos and Aquariums (EAZA) Directors¹ Days 2024

The EAZA Directors' Days 2024 was hosted in the ECRC from

23 to 26 April, bringing together approximately 140 directors from leading zoos and aquariums across Europe. As a premier platform for industry leaders, the event facilitated high-level discussions on critical issues relating to conservation and the long-term vision for zoos and aquariums leading up to 2050.

In addition to a comprehensive programme of meetings and presentations, attendees participated in a gala evening at Ballymaloe Grainstore and had the opportunity to visit the Midleton Distillery. The event's positive impact extended beyond the conference days as many delegates extended their stays, further contributing to local tourism.

A strong emphasis was placed on sustainability throughout the event with careful consideration given to responsible consumption, sustainable transport and energy-efficient practices. The catering provided on site at the ECRC was all done under the zero-waste policy, which focuses on minimising waste at every stage of food preparation, service and cleanup. It involved careful menu planning to reduce surplus food and utilised locally sourced and seasonal ingredients.

Public transport via Irish Rail was the main form of transport that was arranged for the delegates. The conference utilised Fota's dedicated rail stop, which efficiently and sustainably connected the delegates, who were accommodated in city centre venues within walking distance of the train station.

OPERATIONS

Tony O'Dwyer retired from his role as Operations Manager at Fota Wildlife Park following 40 years in employment in the Wildlife Park. Tony joined the Park in its second year in 1984, when he successfully applied for a seasonal role, which eventually led to full-time role while he studied Animal

Management at Sparsholt College. Then, in the late 1990s, Tony became the Park's first Operations Manager.



Following a competitive recruitment process, internal candidate, Martin Rodrigues was appointed as the new Operations Manager and worked alongside Tony in a handover process, providing Martin with the opportunity to tap into Tony's extensive history at the Park.

While 2024 brought a change in management and leadership for the operations and maintenance teams, their work was as important as ever in supporting all departments in their activities. Seasonal general operatives were employed to manage the carpark, litter picking and train support during school holidays and weekends from March to September, delivering a great day out at Fota Wildlife Park for visitors.



SPECIES CONSERVATION SUPPORTED BY FOTA WILDLIFE PARK FUNDING	SUMMARY OF CONSERVATION PROJECT
Membership and funding to Conservation Planning Specialist Group (CPSG)	Membership subscription to the Conservation Planning Specialist Group (CPSG) that part funds their work as an IUCN Species Survival Commission (SSC).
Conservation planning for Asiatic Cheetah and Persian Leopard in Iran	Developing a habitat restoration framework with respect to the optimum reference condition for efficient enhancement of the conservation measures focusing on the Asiatic cheetah and the Persian leopard in Iran.
White clawed crayfish rescue project	Rescue of remaining population of white clawed crayfish from a river system in North Cork, Ireland.
Understanding of animal movement - Daniel Moloney PhD	This is a PhD research project investigates how conservation strategies employed both in a captive or wild settings inform our understanding of animal movements and behaviour.
Natterjack toads head-starter project in County Kerry	This project aims to increase the wild population of natterjack toads in County Kerry by the removal of spawn from ponds by National Parks and Wildlife Services that are seasonally drying out due to climate change. The spawn is reared to the toadlet stage in Fota Wildlife Park and released back to wild to newly created ponds in September. A total of 11,300 toadlets have been released back to the wild since the project began in 2016.
Madagascan pochard captive breeding and release project	Support for the captive breeding and re-introduction of Madagascan pochard in conjunction with Durrell Wildlife Conservation Trust.

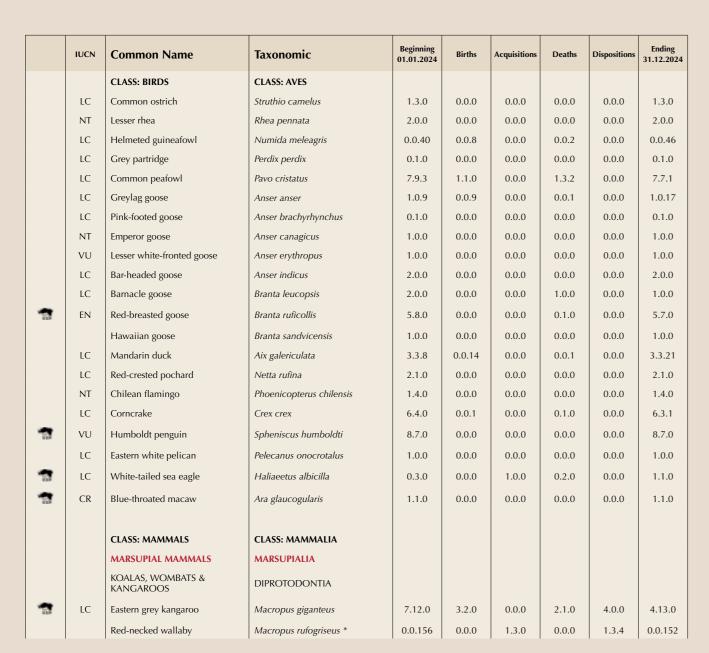
SPECIES CONSERVATION SUPPORTED BY FOTA WILDLIFE PARK FUNDING	SUMMARY OF CONSERVATION PROJECT
Irish corncrake captive breeding and wild population augmentation project	Develop a captive breeding centre within Fota Wildlife Park to breed Irish origin corncrakes for release into the wild.
Irish Breeding Waders European Innovation Partnership (EIP)	Fota Wildlife Park has signed an Operational Group Agreement as a partner in project named 'Breeding Waders EIP' to act as the main head-starter site to incubate, hatch and rear to release stage for ground nesting waders in Ireland.
Cork otter survey	To produce education material on otters in conjunction with Cork Nature Network and to survey County Cork for the presence of otters.
Sumatran tiger conservation in Kerinci Seblat National Park, Sumatra	Protection of Sumatran tigers in Kerinci Seblat National Park.
Nubian\Rothschild's giraffe Conservation Project	Financial support for the Giraffe Conservation Foundation which conducts Nubian giraffe conservation in Uganda, Kenya and Ethiopia.



IUCN	Common Name	Taxonomic	Beginning 01.01.2024	Births	Acquisitions	Deaths	Dispositions	Ending 31.12.2024
	INVERTEBRATES	INVERTEBRATA						
	CLASS: INSECTS	CLASS: INSECTA						
	Madagascar hissing cockroach	Gromphadorhina oblongonota +	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
	Walkingstick	Achrioptera manga +	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
	Butterflies	Papilionoidea +	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
	VERTEBRATES	VERTEBRATA						
	CLASS: FISH	CLASS: PISCES						
LC	Laced moray	Gymnothorax favagineus	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
EN	Denison's barb	Sahyadria denisonii *	0.0.5	0.0.0	0.0.0	0.0.0	0.0.0	0.0.5
LC	Clown loach	Chromobotia macracanthus *	0.0.3	0.0.0	0.0.0	0.0.0	0.0.0	0.0.3
	Buenos Aires tetra	Hyphessobrycon anisitsi *	0.0.6	0.0.0	0.0.0	0.0.0	0.0.0	0.0.6
EN	Madagascar rainbowfish	Bedotia madagascariensis +	0.0.22	0.0.0	0.0.0	0.0.1	0.0.20	0.0.1
VU	Red rainbowfish	Glossolepis incisus *	0.0.11	0.0.0	0.0.0	0.0.0	0.0.0	0.0.11
EN	Boeseman's rainbowfish	Melanotaenia boesemani +	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
LC	Goyder River rainbowfish	Melanotaenia trifasciata +	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
EN	Powderblue panchax	Pachypanchax omalonota *	0.0.11	0.0.0	0.0.0	0.0.1	0.0.0	0.0.10
EN	Panchax	Pachypanchax sakaramyi *	0.0.11	0.0.0	0.0.0	0.0.0	0.0.0	0.0.11
CR	Butterfly splitfin	Ameca splendens +	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
EW	Golden sawfin	Skiffia francesae +	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
LC	Pot-bellied seahorse	Hippocampus abdominalis *	0.0.11	0.0.0	0.0.0	0.0.0	0.0.0	0.0.11
LC	Banded archerfish	Toxotes jaculatrix *	0.0.6	0.0.0	0.0.0	0.0.0	0.0.0	0.0.6
LC	Diamond fish	Monodactylus argenteus	0.0.6	0.0.0	0.0.0	0.0.0	0.0.0	0.0.6
	African silverfish	Monodactylus sebae *	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
LC	Copperband butterflyfish	Chelmon rostratus	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
LC	Schooling coachman	Heniochus diphreutes	0.0.3	0.0.0	0.0.0	0.0.0	0.0.0	0.0.3
LC	French angelfish	Pomacanthus paru	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
VU	Kieneri cichlid	Paretroplus kieneri *	0.0.6	0.0.0	0.0.0	0.0.0	0.0.0	0.0.6
	Anemonefish	Amphiprion	0.0.0	0.0.0	0.1.0	0.0.0	0.0.0	0.1.0



	IUCN	Common Name	Taxonomic	Beginning 01.01.2024	Births	Acquisitions	Deaths	Dispositions	Ending 31.12.2024
		Clown anemonefish	Amphiprion ocellaris *	0.0.6	0.0.0	0.0.0	0.0.0	0.0.0	0.0.6
		Goldtail damselfish	Chrysiptera parasema *	0.0.2	0.0.0	0.0.0	0.0.0	0.0.0	0.0.2
	LC	Spotted scat	Scatophagus argus *	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
	LC	Foxface rabbitfish	Siganus vulpinus *	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
	LC	Fowler's surgeon	Acanthurus fowleri *	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
	LC	Palette surgeonfish	Paracanthurus hepatus	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
	LC	Red Sea sailfin tang	Zebrasoma desjardinii *	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
		CLASS: AMPHIBIANS	CLASS: AMPHIBIA						
	CR	Axolotl	Ambystoma mexicanum *	0.0.4	0.0.0	0.0.0	0.0.1	0.0.0	0.0.3
	CR	Emperor spotted newt	Neurergus kaiseri *	0.0.5	0.0.0	0.0.0	0.0.0	0.0.0	0.0.5
	EN	Natterjack toad	Epidalea calamita *	0.5.0	0.0.0	0.0.0	0.0.0	0.0.0	0.5.0
	EN	Phantasmal poison dart frog	Epipedobates tricolor *	0.0.44	0.0.0	0.0.6	0.0.0	0.0.12	0.0.38
100	CR	Mountain chicken frog	Leptodactylus fallax	0.2.0	0.0.1	2.0.0	0.0.0	0.0.0	2.2.1
	CR	Golden mantella	Mantella aurantiaca *	0.0.2	0.0.0	0.0.0	0.0.1	0.0.0	0.0.1
	EN	Green mantella	Mantella viridis *	0.0.2	0.0.0	0.0.0	0.0.0	0.0.0	0.0.2
	LC	File-eared Tree Frog	Polypedates otilophus *	0.0.30	0.0.1	0.0.0	0.0.7	0.0.0	0.0.24
		Tonkin bug-eyed frog	Theloderma corticale	0.0.1	0.0.0	0.0.0	0.0.0	0.0.0	0.0.1
		CLASS: REPTILES	CLASS: REPTILIA						
_		Red-footed tortoise	Chelonoidis carbonarius	1.0.0	0.0.0	0.0.0	0.0.0	0.0.0	1.0.0
100	CR	Elongated tortoise	Indotestudo elongata	7.4.3	0.0.0	0.0.0	0.0.1	0.0.0	7.4.2
	EN	Lau banded iguana	Brachylophus fasciatus	1.0.0	0.0.0	0.1.0	0.0.0	0.0.0	1.1.0
	LC	Green iguana	Iguana iguana	1.0.0	0.0.0	0.0.0	0.0.0	0.0.0	1.0.0
	LC	Giant Madagascar day gecko	Phelsuma grandis	6.5.1	0.0.0	0.0.0	0.0.0	2.2.0	4.3.1
	LC	Royal/ball python	Python regius	2.0.0	0.0.0	0.0.0	0.0.0	0.0.0	2.0.0
	LC	Dumeril's ground boa	Acrantophis dumerili	3.0.0	0.0.0	0.0.0	0.0.0	0.0.0	3.0.0
102	VU	Jamaican boa	Chilabothrus subflavus	0.0.2	0.0.0	0.0.0	0.0.0	0.0.0	0.0.2





	IUCN	Common Name	Taxonomic	Beginning 01.01.2024	Births	Acquisitions	Deaths	Dispositions	Ending 31.12.2024
		PLACENTAL MAMMALS	PLACENTALIA						
		SLOTHS & ANTEATERS	PILOSA						
10	LC	Linne's two-toed sloth	Choloepus didactylus	1.2.0	0.1.0	0.0.0	0.0.0	0.1.0	1.2.0
		PRIMATES	PRIMATES						
100	VU	Red-bellied lemur	Eulemur rubriventer	0.4.0	0.0.0	0.0.0	0.0.0	0.0.0	0.4.0
107	EN	Ring-tailed lemur	Lemur catta	4.6.0	3.2.1	0.0.0	1.0.1	0.0.0	6.8.0
10	CR	Black-and-white ruffed lemur	Varecia variegata	3.6.0	0.0.0	0.0.0	0.0.0	2.4.0	1.2.0
10	LC	White-faced saki	Pithecia pithecia	1.3.0	0.0.0	0.0.0	0.0.0	0.0.0	1.3.0
10	NT	Black howler	Alouatta caraya	1.2.0	0.0.0	0.0.0	0.0.0	0.0.0	1.2.0
10	EN	Geoffroy's spider monkey	Ateles fusciceps	4.5.0	0.1.0	0.0.0	0.0.0	0.0.0	4.6.0
10	CR	Roloway monkey	Cercopithecus roloway	1.2.0	0.0.0	0.0.0	0.0.0	0.1.0	1.1.0
10	VU	Grey-cheeked mangabey	Lophocebus albigena	1.2.0	0.0.0	0.0.0	0.0.0	0.0.0	1.2.0
10	EN	Lion-tailed macaque	Macaca silenus	7.13.3	0.0.0	0.0.0	0.1.0	0.0.0	7.12.3
10	EN	Drill	Mandrillus leucophaeus	1.3.0	2.0.0	0.0.0	2.0.0	0.0.0	1.3.0
10	LC	Eastern black-and-white colobus	Colobus guereza	3.4.2	0.1.1	0.0.0	1.0.0	0.0.0	2.5.3
10	EN	Francois' langur	Trachypithecus francoisi	1.3.0	0.0.0	0.0.0	0.0.0	0.0.0	1.3.0
	EN	Agile gibbon	Hylobates agilis	2.1.0	0.0.1	0.0.0	0.0.0	0.0.0	2.1.1
10	EN	Lar gibbon	Hylobates lar	1.2.0	0.0.0	0.0.0	0.0.0	0.0.0	1.2.0
10	EN	Siamang	Symphalangus syndactylus	4.2.0	0.0.0	0.0.0	0.0.0	0.0.0	4.2.0
		RODENTS	RODENTIA						
	NT	Patagonian mara	Dolichotis patagonum *	4.5.6	0.0.8	0.0.0	1.0.0	0.0.0	3.5.14
	LC	Capybara	Hydrochoerus hydrochaeris	1.2.0	0.0.0	0.0.0	0.0.0	0.0.0	1.2.0

	IUCN	Common Name	Taxonomic	Beginning 01.01.2024	Births	Acquisitions	Deaths	Dispositions	Ending 31.12.2024
		CARNIVORES	CARNIVORA						
100	NT	Cheetah	Acinonyx jubatus	2.10.0	0.0.0	0.1.0	0.2.0	2.2.0	0.7.0
100	EN	Asian lion	Panthera leo	1.3.0	3.0.3	0.0.0	0.0.3	0.0.0	4.3.0
-	CR	Sumatran tiger	Panthera tigris	1.1.0	0.0.0	1.0.0	0.0.0	0.0.0	2.1.0
		Meerkat	Suricata suricatta	2.5.0	1.3.4	0.0.0	0.1.4	0.0.0	3.7.0
	LC	Grey seal	Halichoerus grypus	0.1.0	0.0.0	0.0.0	0.0.0	0.0.0	0.1.0
10	EN	Red panda	Ailurus fulgens	2.5.0	0.0.0	0.0.0	0.0.0	1.2.0	1.3.0
		ODD-TOED UNGULATES	PERISSODACTYLA						
	NT	Plains zebra	Equus quagga	3.2.0	0.0.0	0.0.0	0.0.0	0.0.0	3.2.0
100	VU	South American tapir	Tapirus terrestris	2.2.0	0.0.0	0.0.0	0.0.0	0.0.0	2.2.0
100	VU	Greater one-horned rhinoceros	Rhinoceros unicornis	3.1.0	0.0.0	0.0.0	0.0.0	1.0.0	2.1.0
		EVEN-TOED MAMMALS	CETARTIODACTYLA						
60	CR	Visayan warty pig	Sus cebifrons	1.1.0	0.0.0	0.0.0	0.0.0	0.0.0	1.1.0
100	EN	Alfred's spotted deer	Rusa alfredi	1.2.0	0.0.0	0.0.0	0.0.0	0.0.0	1.2.0
100	VU	Giraffe	Giraffa camelopardalis	2.8.0	0.0.0	0.0.0	1.0.0	0.0.0	1.8.0
60	NT	European wisent	Bison bonasus	2.4.0	0.0.0	1.0.0	0.0.0	0.0.0	3.4.0
100	EW	Scimitar-horned oryx	Oryx dammah	2.7.0	0.0.0	0.0.0	0.0.0	0.0.0	2.7.0
100	EN	Southern lechwe	Kobus leche	2.8.0	2.1.0	0.0.0	0.0.0	0.0.0	4.9.0
		TOTAL		139.200.446	15.12.52	6.6.6	10.12.26	13.15.36	137.191.442

^{* =} Group Inventory Counts Included In Row ** = Colony counts included in Row

(A company limited by guarantee and not having a share capital)

THE ZOOLOGICAL SOCIETY OF IRELAND

(A company limited by guarantee and not having a share capital)

Reports and Consolidated **Financial Statements** for the financial year ended 31 December 2024

Registered number: 207824

Registered Charity Number: 20003715

^{+ =} Both Group and Colony counts included in Row

REPORTS AND CONSOLIDATED FINANCIAL STATEMENTS FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

CONTENTS	PAGE
MEMBERS OF BOARD AND OTHER INFORMATION	91
BOARD'S REPORT	93
BOARD'S RESPONSIBILITIES STATEMENT	100
INDEPENDENT AUDITOR'S REPORT	101
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	104
CONSOLIDATED BALANCE SHEET	103
COMPANY BALANCE SHEET	107
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY	109
COMPANY STATEMENT OF CHANGES IN EQUITY	110
CONSOLIDATED STATEMENT OF CASH FLOWS	111
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	112

MEMBERS OF BOARD AND OTHER INFORMATION

∕lemb∈	ers of	Board
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Board President	Carmel O'Connor

Immediate past President	Ann Keenan
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Ordinary Board members: Andy Beer (resigned 19/12/2024)

> Tom Cassin Emma Teeling Yvonne Buckley Sharon McCabe

John McMahon (deceased 06/04/2024) Peter McKenna (appointed 26/09/2024) Enda Faughnan (appointed 26/09/2024 Ciaran O'Keeffe (appointed 26/09/2024)

Other information:

Past Presidents Michael Daly Tom Dunphy

Secretary and registered office Tom Cassin

The Zoological Gardens

Phoenix Park Dublin 8

Auditors Deloitte Ireland LLP

Chartered Accountants and Statutory Audit Firm

Deloitte & Touche House 29 Earlsfort Terrace

Dublin 2 D02 AY28

MEMBERS OF BOARD AND OTHER INFORMATION (continued)

Bankers

Bank of Ireland
2 College Green
Dublin 2

AIB 66 South Mall Cork

Solicitors

Mason Hayes & Curran
South Bank House
Barrow Street

Dublin 4

A&L Goodbody 3 Dublin Landings North Wall Quay

IFSC Dublin 1

Charity Number 20003715

Charity Tax Number CHY 2964

Company Number 207824

BOARD'S REPORT

The Board presents its annual report together with the audited consolidated financial statements for the financial year ended 31 December 2024.

Consolidation

These financial statements form the Consolidated Financial statements of the Zoological Society of Ireland which includes the results of both Dublin Zoo and Fota Wildlife Park for the financial year ended 31 December 2024.

Principal activities, business review and future developments

The principal activities of The Zoological Society of Ireland ("the Group") are:

- a. The operation of a Zoo in the Phoenix Park, Dublin.
- b. The operation of a Zoo at Fota Wildlife Park.
- c. To promote the conservation of wildlife generally worldwide by advancing the study of environmental sciences and knowledge of zoology through science and scientific education.

The attendance for the financial year ended and the prior year was as follows:

	2024	2023
Dublin (incl Wild Lights)	1,165,099	1,161,937
Wild Lights	229,518	224,016
Fota Wildlife Park	428,745	430,024

Dublin Zoo held the very popular Wild Lights event once again during October, November and December. With the

support of the public, this event was successful, confirming the Zoo as a year-round outstanding family attraction.

The directors would like to acknowledge and thank the Government through the Office of Public Works (OPW) for its continuing support, which included capital grants of €3m to the group during 2024. The directors are also very grateful to the public for its continued generous support of Dublin Zoo and Fota Wildlife Park.

The Group has recorded a deficit of €649k for 2024. Both Zoos continue to implement their respective 10-year Strategic Plans. These plans envisage significant capital expenditures on both existing and new animal habitats.

Dublin Zoo's Vision 2021-2031 ambition is to become a zoo-based conservation organisation of national and global significance with a focussed investment in species survival, conservation, research and environmental sustainability both nationally and globally. Full details of the strategic plan are available on the Dublin Zoo website.

Fota Wildlife Park's 2030 Vision sets the target to become one of the Top 10 zoological parks in Europe with species conservation, public education and engagement at its core to enable a more sustainable and biodiverse future at national and global level.

Capital Expenditure

The Group spent €4.8m on Capital Expenditure during 2024 compared to €8.8m in 2023. Key projects included the installation of solar panels, extensive work completed on the Kaziranga trail, general upgrades to animal habitats and the refurbishment of the Giraffe House in Fota Wildlife Park.

These projects have been facilitated by the receipt of Government capital grants of €3m through the OPW together with existing reserves.

The directors have authorised Capital Expenditure projects amounting to €8.5m to progress to planning during 2025. The approved expenditure will be funded from existing reserves, future planned surpluses and the expected 2025 Capital grants. Future Capital expenditure envisioned in Vision 2021-2031 is anticipated to be €36.6m in the period from 2025 to 2031.

Reserves Policy

The Board strives to maintain reserves at a level that enables the Group to manage financial risk and any volatility in its annual income streams.

An amount of €3.75m (2023: €3m) has been set aside by the Board at 31 December 2024, to help protect against any future pandemic outbreaks, the threat of zoonotic disease or any other emergency that might impact on the ongoing finances of the group.

Principal risks and uncertainties

The Board has established clear procedures to establish the Company's appetite for risk and define and communicate policies and procedures regarding the management and oversight of risk to which it may be exposed.

These procedures allow the Board and the senior management team to design and implement mitigating controls to reduce the likelihood of risks occurring, and to limit the potential impact if these risks do occur.

Risk Management process

The Board sets out and reviews the Society's risk appetite statement on an annual basis. This statement sets out the amount of risk that the company is willing to seek or accept in the pursuit of its objectives. It also sets out the framework in which the company's risk management policies and procedures operate.

The Company has a detailed risk register that contains the key risks that the senior management team and the Board consider apply to it. Risk management is an integrated part of all organisational activities and procedures have been established for the monitoring and mitigation of risk.

Risk Assessment

Risks are assessed according to their likelihood to occur and their potential impact on the Company. This provides a score that identifies the principal risks and the documenting of the controls in place to mitigate these risks.

The risk register is a standing agenda item for the Board. The register is reviewed and assessed annually by the Board. Any significant changes proposed to be made to the register are reported to the Board and minuted.

Principal risks and uncertainties

The Board has considered the principal risks to which the Group is exposed and is satisfied that suitable processes have been put in place to identify and manage these risks.

The following principal risks and uncertainties were applicable during 2024:

- Potential impact on visitor numbers due to adverse weather conditions;
- The effect of climate change impacting animals and visitor numbers;
- Uncertainty impacting on the Group relating to an outbreak of animal disease;
- Changes in the economic environment;
- Data Protection;
- · Health and Safety; and
- Cyber security

Specific actions have been put in place to manage each of the risks identified above.

During the financial year, Fota Wildlife Park was subject to illegal activity on its website and engaged with all necessary authorities and stakeholders on the matter at significant cost to the company. The main costs arising were the engaging of cyber security experts to support the company, together with legal and professional fees incurred in responding to the issues arising.

The Board is conscious of the financial impact of the above risks and strives to maintain adequate cash reserves to allow it to continue to trade in the event of risks which may impact its ability to generate cashflow.

Results for the financial year

The results for the financial year and state of affairs of the Group are set out in the consolidated income and expenditure account and balance sheet on pages 17 and 18.

Board and secretary

The members of the Board, who served at any time during the financial year except as noted, were as follows:

Ann Keenan
Andy Beer
(resigned 19/12/2024)
Tom Cassin
Emma Teeling
Yvonne Buckley
Sharon McCabe
Iohn McMahon
Peter McKenna
(appointed 26/09/2024)
Enda Faughnan
(appointed 26/09/2024)
Ciaran O'Keeffe
(appointed 26/09/2024)
Carmel O'Connor

Secretary:

(deceased 06/04/2024)

Tom Cassin

Legal status

The Company is limited by guarantee and has no share capital. The Company has charitable status and is registered with the Charities Regulatory Authority.

Subsidiaries

The statutory information concerning subsidiary undertakings is provided in Note 8 to the financial statements.

STRUCTURE AND GOVERNANCE

The Company is governed by a Board of Directors, who under the Society's Articles of Association, are not entitled to remuneration for their services. The directors are legally responsible for the governance and overall control and management of the Company and bring their varied experience in their respective fields to bear on guiding the Company.

The Articles of Association set out the procedures regarding the appointment and retirement of board members and the proceedings of meeting. Training is provided for directors through their terms of office. A detailed Board Induction Pack is provided to new board members. The Board has also approved and adopted a Code of Conduct for its directors.

Conflict of Interest

The Company has a conflict of interests' policy and all Board members sign a conflict of interest form, which is reviewed and approved annually by the Board. In addition, directors sign a register of interests' declaration disclosing any conflicts when appropriate. Conflict of interest is a standing agenda item at all board meetings. If a board member has a perceived or real conflict of interest, the director concerned should declare his/her interest at the earliest possible opportunity and withdraw from any discussion, decision or action relating to the conflict.

Board Evaluation

In 2021 the Board conducted a self-evaluation, with guidance from an independent expert firm. The conclusion from the evaluation was that the Board operates

effectively, with a strong governance structure in place. Recommendations arising from the Board evaluation to improve effectiveness have been implemented.

Governance

The Board delegates the management of the day-to-day operation of the Company and Fota Wildlife Park, and the implementation of policy and strategy to the Directors (Chief Executives) of both Zoos. The executive management teams, chaired by the Directors and consisting of key senior executives, are the main day to day decision making forums of the Zoos.

The Board believes that committing to a high level of corporate governance is essential to achieving the optimal standard of operation of the Group's activities. To accomplish this, the Group has competent executive teams. There is clear division of responsibility with the Board retaining control of major decisions, and the Zoo Directors are responsible for devising strategy and policy within authority delegated to them by the Board. The Board is responsible for providing leadership, setting strategy and ensuring control.

There are clear and detailed processes for reporting management information to the Board. The Board is provided with regular information, which includes key performance and risk indicators for all aspects of the organisation. The Board meets regularly as required and met nine times during 2024.

The Board is satisfied that the Company is in compliance with the Charities Governance Code, and all relevant legal and regulatory requirements relating to its operations. The Board reviews its compliance with the Code on an annual basis. The Board also considered the Guidelines for Charitable Organisations on Fundraising from the Public in respect of its digital fundraising initiatives and has adopted a Fundraising Policy, Donor Charter and Donor Complaints policy.

The Board recognises its overall responsibility for the Company's systems of internal control and for reviewing their effectiveness. It has delegated responsibility for the implementation of this system to the executive team. This system includes financial controls, which enable the Board to meet its responsibilities for the integrity and accuracy of the Company's accounting records.

Committees

The Board is supported by a number of committees (not confined to Board members) established for good governance. The terms of reference for all Board committees are updated and approved by the Board on a regular basis

ESG (Environment, Social and Governance) considerations are to the fore in all decisions made by the Zoological Society of Ireland and underpin both Dublin Zoo's and Fota Wildlife Park's strategic plans. These areas are also a specific focus of the Board committees. Environment forms part of the remit of the Conservation, Education and Research Committee and the Health and Safety and Sustainability Committee. Social matters are considered by both the Ethics Committee and the Governance and People Committee, and governance is overseen by the Governance Committee.

Finance and Audit Committee

The function of the Finance and Audit Committee is to assist the Board of the Company on matters of financial

management and in fulfilling its responsibilities by providing an independent review of financial reporting, by satisfying itself as to the effectiveness of the Company's internal controls and as to the sufficiency of the external audit process. In addition, the Committee also provides oversight over the management of the company's IT environment and related risks.

The Committee also monitors and reviews the financial performance of the Company, the annual budget for recommendation to the Board, and also advises on remuneration and commercial contract issues. The Committee comprises of three board members and met four times during the year. The Committee members also supported management on an informal basis throughout the year.

Governance and People Committee

The principal objective of the Governance and People Committee is to advise the board on good corporate governance and, in particular, to monitor compliance with the Governance Code for Charity Organisations in Ireland. In addition, the Committee ensures that there is a robust and effective process for evaluating the performance of the Board to ensure that it fulfils its responsibilities. The Committee is also responsible for identifying and appointing suitably skilled directors to the Board, taking into account the existing balance of skills, knowledge, experience and diversity of the Board. The Committee also oversees strategic HR matters. It comprises two board members and the current President and met four times during the year.

Conservation, Education and Research Committee

The purpose of the Conservation, Education and Research Committee is to assist the Board of the Company on matters relating to the Conservation and Education of visitors through a range of different media and to initiate and participate in appropriate Research projects and studies of endangered species and habitats within Ireland and other International Countries where the Company has an interest. The Committee helps to formulate the conservation strategy of the Company and recommends to the Board the direction this should take and which national and international initiatives are worthy of its financial support. The Committee proposes to the Board the level of support which is appropriate for nominated conservation projects. The Committee also liaises with, and delegates to employees of the Company where appropriate, the responsibility to commission or engage in research in partnerships with relevant universities, higher education institutes or conservatino organisations. The Committee comprises one member of the Board, the Zoo Director and some internal and external appointees (including the Head of Education and Learning and the Conservation Officer). The Committee met three times during the year.

Ethics and Welfare Committee

The purpose of the Ethics Committee is to provide a forum for advice, audit, ethical review and support of animal health, animal welfare, and ethical aspects of conservation and research activities carried out or supported by Dublin Zoo to achieve its purpose and deliver its charitable objects. In compliance with the provisions of the Irish Standards of Modern Zoo Practice (Appendix 3), the Ethics Committee fulfils the requirement to ensure a robust and documented ethical review process. The Committee comprises three

members of the Board, the Zoo Director and some internal and external appointees and met four times during the year.

Health, Safety and Sustainability Committee

The purpose of the Health, Safety and Sustainability
Committee is to assist the Board to fulfil its responsibilities
in ensuring that the Company's policies, procedures and
working practices regarding Health and Safety meet or
exceed any legal obligations, with the object of promoting
the well-being and safety of the Zoo employees, the public,
suppliers and others who may be affected by its activities. The
Committee also oversees strategic sustainability matters and
the implementation of the Zoo's Sustainability Master Plan.

The Committee's responsibilities include:

- To maintain an overall assessment of the Zoo's key health and safety risks from which priorities for action are set and reviewed annually.
- To review and approve the Zoo's Health and Safety policy, and all other policies, standards and strategy for the management of health and safety at work within the Zoo and compliance with health and safety legislative and other requirements.
- To review safety performance indicators, (accidents and near misses), investigations of significant failures, independent inspection and audit reports and associated remedial actions.
- To ensure that it and the Board are kept abreast of any regulatory changes in relation to health and safety and the impact such changes may have on the activities of the Zoo.

The Committee comprises two members of the Board, the

Zoo Director, and some external and internal appointees. The Committee met twice during the year.

Accounting Records

The measures that the directors have taken to secure compliance with the requirements of sections 281 to 285 of the Companies Act 2014 with regard to the keeping of accounting records, are the employment of appropriately qualified accounting personnel and the maintenance of computerised accounting systems. The accounting records are maintained at the Society's registered office in The Zoological Gardens, Phoenix Park, Dublin 8.

Post Balance Sheet Events

No significant events have taken place since the year end that would result in adjustment to the financial statements or inclusion of a note thereto.

Health and Safety Policy

The Company has a health and safety policy in place which is being complied with and satisfactorily operated.

Political Donations

The Company did not make any political donations during the financial year, which require disclosure in accordance with the Electoral Act, 1997.

Going Concern

Further details regarding the adoption of the going concern basis can be found in Note 3 to the financial statements.

Statement on Relevant Audit Information

Each of the persons who are directors at the time when this Directors' report is approved has confirmed as follows:

So far as each of the directors in office at the date of approval of the financial statements is aware:

- there is no relevant audit information of which the Company's auditors are unaware; and
- the Board members have taken all the steps that they
 ought to have taken as Board Members in order to make
 themselves aware of any relevant audit information and
 to establish that the Company's auditors are aware of that
 information.

Auditors

The auditors, Deloitte Ireland LLP, Chartered Accountants and Statutory Audit Firm, continue in office in accordance with Section 383(2) of the Companies Act 2014.

Approved by the Board and signed on its behalf by:

Comel dema Your lausin

Carmel O'ConnorBoard President

Tom CassinDirector/Secretary

Date: 20 June 2025

BOARD'S RESPONSIBILITIES STATEMENT

The directors are responsible for preparing the directors' report and the financial statements in accordance with the Companies Act 2014.

Irish company law requires the directors to prepare financial statements for each financial year. Under the law, the directors have elected to prepare the financial statements in accordance with FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland issued by the Financial Reporting Council ("relevant financial reporting framework"). Under company law, the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the assets, liabilities and financial position of the company as at the financial year end date and of the profit or loss of the company for the financial year and otherwise comply with the Companies Act 2014.

In preparing those financial statements, the directors are required to:

- select suitable accounting policies for the Company Financial Statements and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;

- state whether the financial statements have been prepared in accordance with the applicable accounting standards, identify those standards, and note the effect and the reasons for any material departure from those standards; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for ensuring that the company keeps or causes to be kept adequate accounting records which correctly explain and record the transactions of the company, enable at any time the assets, liabilities, financial position and profit or loss of the company to be determined with reasonable accuracy, enable them to ensure that the financial statements and directors' report comply with the Companies Act 2014 and enable the financial statements to be audited. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE ZOOLOGICAL SOCIETY OF IRELAND

Report on the audit of the financial statements

Opinion on the financial statements of The Zoological Society of Ireland ("the company")

In our opinion the group and parent company financial statements:

- give a true and fair view of the assets, liabilities and financial position of the group and parent company as at 31 December 2024 and of the loss of the group for the financial year then ended; and
- have been properly prepared in accordance with the relevant financial reporting framework and, in particular, with the requirements of the Companies Act 2014.

The financial statements we have audited comprise:

the group financial statements:

- the Consolidated Statement of Comprehensive Income;
- the Consolidated Balance Sheet;
- the Consolidated Statement of Changes in Equity;
- · the Consolidated Cash Flow Statement; and
- the related notes 1 to 19, including a summary of significant accounting policies as set out in note 1.

the parent company financial statements:

- the Company Balance Sheet;
- the Company Statement of Changes in Equity; and

• the related notes 1 to 19, including a summary of significant accounting policies as set out in note 1.

The relevant financial reporting framework that has been applied in their preparation is the Companies Act 2014 and FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland' issued by the Financial Reporting Council ("the relevant financial reporting framework").

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (Ireland) (ISAs (Ireland)) and applicable law. Our responsibilities under those standards are described below in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the group and parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Ireland, including the Ethical Standard issued by the Irish Auditing and Accounting Supervisory Authority, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events

or conditions that, individually or collectively, may cast significant doubt on the group and parent company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the Reports and Consolidated Financial Statements for the financial year ended 31 December 2024, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the Reports and Consolidated Financial Statements for the financial year ended 31 December 2024. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of directors

As explained more fully in the Directors' Responsibilities Statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view and otherwise comply with the Companies Act 2014, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group and parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on IAASA's website at: https://iaasa.ie/publications/description-of-the-auditors-responsibilities-for-the-audit-of-the-financial-statements. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

Opinion on other matters prescribed by the Companies Act 2014

Based solely on the work undertaken in the course of the audit, we report that:

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion the accounting records of the parent company were sufficient to permit the financial statements to be readily and properly audited.
- The parent company balance sheet is in agreement with the accounting records.
- In our opinion the information given in the directors' report is consistent with the financial statements and the directors' report has been prepared in accordance with the Companies Act 2014.

Matters on which we are required to report by exception

Based on the knowledge and understanding of the group and parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the directors' report.

We have nothing to report in respect of the provisions in the

Companies Act 2014 which require us to report to you if, in our opinion, the disclosures of directors' remuneration and transactions specified by law are not made.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Section 391 of the Companies Act 2014. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Rulad Lloward

Richard Howard

For and on behalf of Deloitte Ireland LLP
Chartered Accountants and Statutory Audit Firm
Deloitte & Touche House, 29 Earlsfort Terrace, Dublin 2

23 June 2025

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

	Notes	2024	2023
		€′000	€′000
INCOME	4	25,916	25,107
EXPENDITURE			
Operating costs		(24,652)	(24,341)
Administration expenses		(2,752)	(1,252)
TOTAL EXPENDITURE		(27,404)	(25,593)
OPERATING (DEFICIT)		(1,488)	(486)
Amortisation of grants	12	839	617
(DEFICIT)/SURPLUS FOR THE FINANCIAL YEAR		(649)	131
OTHER COMPREHENSIVE INCOME			
Actual return less expected return on pension scheme assets	13	(194)	139
Actuarial gain / (loss) on pension scheme obligations	13	114	(124)
Movement in pension asset ceiling	13	80	(15)
TOTAL COMPREHENSIVE (DEFICIT)/SURPLUS FOR THE FINANCIAL YEAR	AR	(649)	131

CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 2024

	Notes	2024 €′000	2023 €′000
Fixed Assets			
Tangible assets	7	34,483	34,165
Current Assets			
Stocks	9	303	389
Debtors	10	1,548	3,305
Cash at bank and in hand			
- Restricted - Lemur fund		-	12
 Restricted – Conservation fund 	11	142	-
- Unrestricted		15,345	13,409
		17,338	17,115
Creditors: Amounts falling due within one year	11	(6,209)	(7,180)
Net Current Assets		11,129	9,935
Total Assets less Current Liabilities		45,612	44,100
Government Grants Deferred Credit	12	(10,605)	(8,444)
NET ASSETS		35,007	35,656
Accumulated surplus		31,257	12,694
Development reserve		-	19,962
Emergency reserve		3,750	3,000
		35,007	35,656

CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 2024 (Continued)

The financial statements were approved and authorised for issue by the Board of Directors on 8 July 2025 and signed on its behalf by:

Comel dema Tom lassin

Carmel O'Connor Board President Tom Cassin

Director/Secretary

20 June 2025

COMPANY BALANCE SHEET AS AT 31 DECEMBER 2024

	Notes	2024	2023
Fixed Assets		€′000	€′000
1.000			
Tangible assets	7	18,128	18,935
Financial assets	8	500	500
		18,628	19,435
Current Assets			
Stocks	9	185	248
Debtors			
- Due within one year	10	1,315	2,834
Cash at bank and in hand:			4.0
Restricted – Lemur fundRestricted – Conservation fund	11	- 142	12
- Restricted - Conservation lund - Unrestricted	11	142 13,070	10,946
- Official Carlo		14,712	14,040
Creditors: Amounts falling due within one year	11	(4.495)	(F 476)
Creditors: Amounts faming due within one year	11	(4,485)	(5,476)
Net Current Assets		10,227	8,564
Total Assets less Current Liabilities		28,855	27,999
Government Grants Deferred Credit	12	(6,612)	(5,283)
NET ASSETS		22,243	22,716
Represented by:			
Accumulated surplus		19,243	8,741
Development reserve		-	10,975

Emergency reserve 3,000 3,000 22,243 22,716

The financial statements were approved by the Council on 8 July 2025 and signed on its behalf by:

Comel dema Tom lassin

Carmel O'Connor Board President **Tom Cassin**

Director/Secretary

20 June 2025

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

	Development Reserve €′000	Emergency Reserve €'000	Accumulated Surplus €′000	Total €′000
Balance at 1 January 2023 Surplus for the financial year	19,962 	3,000	12,563 131	35,525 131
At 31 December 2023	<u>19,962</u>	3,000	12,694	35,656
Deficit for the financial year Transfer between reserves	(19,962)	750	(649) 19,212	(649)
At 31 December 2024		3,750	31,257	35,007

In prior years, a certain amount was set aside in reserves to fund future capital investment. While the Zoo will continue to invest in the Zoo, the directors have elected not to have a separate reserve within equity to reflect future expenditure.

The Emergency reserve represents funds set aside by the Board to protect against the impact of any zoonotic disease or other emergency which might affect the ongoing finances of the group.

COMPANY STATEMENT OF CHANGES IN EQUITY FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

	Development Reserve €′000	Emergency Reserve €'000	Accumulated Surplus €′000	Total €′000
Balance at 1 January 2023 Deficit for the financial year	10,975 	3,000	8,923 (182)	22,898 (182)
At 31 December 2023 Deficit for the financial year Transfer between reserves	10,975 (10,975)	3,000	8,741 (473) 10,975	<u>22,716</u> (473)
At 31 December 2024		3,000	<u>19,243</u>	22,243

In prior years, a certain amount was set aside in reserves to fund future capital investment. While the Zoo will continue to invest in the Zoo, the directors have elected not to have a separate reserve within equity to reflect future expenditure.

The Emergency reserve represents funds set aside by the Board to protect against the impact of any zoonotic disease or other emergency which might affect the ongoing finances of the company.

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

	Notes	2024 €′000	2023 €′000
NET CASH INFLOW			
FROM OPERATING ACTIVITIES	15	3,838	2,004
Cash flows from investing activities			
Payment to acquire tangible fixed assets		(4,772)	(8,835)
Capital grant received relating to fixed assets		3,000	3,013
Proceeds on disposal of tangible assets		-	2
Net cash outflow from investing activities		(1,772)	(5,820)
MOVEMENT IN CASH			
IN THE FINANCIAL YEAR		2,066	(3,816)
Cash and cash equivalents at beginning of financial year		13,421	17,237
Cash and cash equivalents at end of financial year		15,487	13,421

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

1. ACCOUNTING POLICIES

The principal accounting policies are summarised below. They have all been applied consistently throughout the current and the preceding financial year.

General Information and Basis of Accounting

The Zoological Society of Ireland is a company incorporated in Ireland under the Companies Act 2014. The address of the registered office is given on page 91. The nature of the company's operations and its principal activities are set out in the Board's report on pages 93 to 99.

The financial statements have been prepared under the historical cost convention and in accordance with the Companies Act 2014 and Financial Reporting Standard 102 (FRS 102) issued by the Financial Reporting Council. The consolidated financial statements incorporate the financial statements of the company and its subsidiary undertaking for the financial year ended 31 December 2024.

The functional currency of the Zoological Society of Ireland is considered to be Euro because that is the currency of the primary economic environment in which the company operates.

Income

Income comprises of gate receipts, annual pass, donations,

sponsorship, government funding and membership subscriptions relating to the current period. Where subscriptions are received in advance or income relates to future performance requirement, the related revenue is included in deferred income in creditors and released to the income and expenditure account in the relevant period.

Other income comprises the value of sales, excluding VAT and discounts, to third parties and is recognised once the related goods or services are provided to customers.

Foreign Currencies

Transactions in foreign currencies are recorded at the rate at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are reported at the rates of exchange prevailing at that date. Exchange differences are recognised in the income and expenditure account in the period in which they arise.

Taxation

Dublin Zoo is regarded by the Revenue Commissioners as established for charitable purposes and, accordingly, is exempt from corporation tax.

Restricted cash

Where cash balances are ring fenced for specific purposes and may not be available for general use by the Group, the cash balance is noted as being restricted.

Tangible Fixed Assets and Depreciation

Tangible fixed assets are stated at cost less accumulated

depreciation and any provision for impairment. The charge for depreciation is calculated to write down the cost of tangible fixed assets to their estimated residual values by equal annual instalments over their expected useful lives as follows:

Plant, machinery and equipment	20%
Computer equipment and software	331/3%
Motor vehicles	20%
Habitats	3.33% to 10%

Land and assets under construction are not depreciated.

Residual value represents the estimated amount which would currently be obtained from disposal of an asset, after deducting estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

An asset is impaired where there is objective evidence that, as a result of one or more events that occurred after initial recognition, the estimated recoverable value of the asset has been reduced to below its carrying amount. The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use.

Where indicators exist for a decrease in impairment loss, the prior impairment loss is tested to determine reversal. An impairment loss is reversed on an individual impaired asset to the extent that the revised recoverable value does not lead to a revised carrying amount higher than the carrying value had no impairment been recognised.

Financial Fixed Assets

Financial fixed assets are stated at cost less provision for impairment. An asset is impaired where there is objective evidence that, as a result of one or more events that occurred after initial recognition, the estimated recoverable value of the asset has been reduced to below its carrying amount.

Government Support/Grants

The land in the Phoenix Park occupied by Dublin Zoo is used under a licence from the State, Dublin Zoo being a tenant at will. No value is reflected in these financial statements in respect of this licence or this land.

In prior periods grants under the Government Capital Investment Programme in the company were provided and accounted for by the Office of Public Works (OPW) and any related assets were therefore excluded in the financial statements. The facilities provided under this Programme are used by the company under licence from the State.

Other Government grants in respect of capital expenditure are credited to a deferred grant account and are amortised to the income and expenditure account by equal annual instalments over the expected useful lives of the related assets.

Government revenue grants received are accounted for when received or if conditions exist, when those conditions are met.

Leases

Rentals under operating leases are charged on a straightline basis over the lease term, even if the payments are not

made on such a basis. Benefits received and receivable as an incentive to sign an operating lease are similarly spread on a straight-line basis over the lease term.

Animals

No value is placed on the animals belonging to the Society.

Stocks

Stocks, other than animals, are stated at the lower of cost and net realisable value.

Retirement Benefits

For defined benefit schemes the amounts charged to the operating surplus are the costs arising from employee services rendered during the period and the cost of plan introductions, benefit changes, settlements and curtailments. They are included as part of staff costs. The net interest cost on the net defined asset/liability is charged to the income and expenditure account. Remeasurement comprising actuarial gains and losses and the return on scheme (excluding amounts included in net interest on the net defined benefit asset/liability) are recognised immediately in other comprehensive income.

A defined benefit scheme is funded, with the assets of the scheme held separately from those of the Society, in separate trustee administered funds. Pension scheme assets are measured at fair value and liabilities are measured on an actuarial basis using the projected unit method. The actuarial valuations are obtained at least triennially and are updated at each balance sheet date.

For the defined contribution scheme the amount charged to the income and expenditure account in respect of pension costs and other post-retirement benefits is the contributions payable in the year. Differences between contributions payable in the year and contributions actually paid are shown as either accruals or prepayments in the balance sheet.

Financial Instruments

Financial assets and financial liabilities are recognised when the company becomes a party to the contractual provisions of the instrument. Financial liabilities are classified according to the substance of the contractual arrangements entered into.

All financial assets and liabilities are initially measured at transaction price (including transaction costs), except for those financial assets classified as at fair value through the income and expenditure account, which are initially measured at fair value (which is normally the transaction price excluding transaction costs), unless the arrangement constitutes a financing transaction. If an arrangement constitutes a financing transaction, the financial asset or financial liability is measured at the present value of the future payments discounted at a market rate of interest for a similar debt instrument.

Financial assets and liabilities are only offset in the statement of financial position when, and only when there exists a legally enforceable right to set off the recognised amounts and the company intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Financial assets are derecognised when and only when a) the contractual rights to the cash flows from the financial asset expire or are settled, b) the company transfers to another

party substantially all of the risks and rewards of ownership of the financial asset, or c) the company, despite having retained some, but not all, significant risks and rewards of ownership, has transferred control of the asset to another party. Financial liabilities are derecognised only when the obligation specified in the contract is discharged, cancelled or expires.

Financial assets and liabilities that are classified as receivable or payable within one year on initial recognition are measured at the undiscounted amount of the consideration expected to be received or paid, net of impairment.

2. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of accounting policies, which are described in note 1, the Board members are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognise in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the critical judgements and estimates that the Board members have made in the process of applying the accounting policies and that have the most significant effect on the amounts recognised in the financial statements:

Retirement Benefit Obligations

The estimation of and accounting for retirement benefit obligations involves judgements made in conjunction with independent actuaries. There are estimates in respect of life expectancy of scheme members, increase in salaries, inflation as well as discount rates. The assumptions used are disclosed in note 13.

Useful economic lives

The annual depreciation charge for tangible fixed assets is sensitive to changes in the estimated useful economic lives and residual values of the assets. Determination of appropriate useful economic lives is a key judgement and the useful economic lives and residual values are re-assessed annually. They are amended when necessary to reflect current estimates, based on technological advancement, future investments, economic utilisation and the physical condition of the assets.

3. GOING CONCERN

Based on budgets and cashflow projections, the Board has a reasonable expectation that the Group can meet all liabilities for a period of not less than twelve months from the date of approval of the financial statements. Accordingly, the Board have prepared the financial statements of the company on a going concern basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

4. INCOME

Operating Income arising from the following activities undertaken wholly within Ireland.

	2024 €′000	2023 €′000
Gate receipt income	17,707	16,642
Annual pass income	2,913	2,951
Shop income	3,794	3,537
Other income	1,502	1,977
Operating income	25,916	25,107

Given the nature of the Zoo's activities, goods and services are donated to the Zoo by other organisations where the fair value of such goods and services may not be readily determinable.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

5. EMPLOYEE INFORMATION

	2024 €′000	2023 €′000
Staff numbers and costs		
Average number of employees:		
Management	18	19
Administration	17	17
General staff		
- full time	93	108
- part time	41	18
Shop	39	19
	208	181
The aggregate payroll costs of these persons were as follows:		
	2024	2023
	€′000	€′000
Wages and salaries	7,683	6,954
Social welfare costs	921	763
Retirement benefit costs (Note 13)	394	325
	8,998	8,042

The total remuneration for 18 key management personnel for the financial year totalled €1,576,465 (2023: €1,479,648 for 19 key management personnel).

All payroll costs were expensed during the current and prior financial year.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

6. OPERATING (LOSS)/ SURPLUS

	2024	2023
	€′000	€′000
The operating surplus is stated after charging:		
Remuneration of Board members	-	-
Auditor's remuneration in respect of		
- the audit of the entity	32	27
- the audit of subsidiary entity	19	16
- tax services	-	22
	4.454	4.146
Depreciation	4,454	4,146
Loss on disposal of fixed assets	-	188

Under the Society's Articles of Association, Board members are not entitled to remuneration. Auditor's remuneration is disclosed net of VAT.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

7. TANGIBLE FIXED ASSETS

Group	Land €′000	Plant & Equipment €′000	Computer Equipment €'000	Motor vehicles €'000	Build & Habitats €′000	Total €′000
Cost:	2 000	2 000	2 333	2 000	2 300	2 333
At 1 January 2024	191	3,305	1,442	942	60,067	65,947
Additions	-	579	-	21	4, 172	4,772
Disposals					(103)	(103)
At 31 December 2024	191	3,884	1,442	<u>963</u>	64,136	70,616
Depreciation:						
At 1 January 2024	-	2,765	1,297	650	27,070	31,782
Charge for financial year	-	229	90	65	4,070	4,454
On disposals					(103)	(103)
At 31 December 2024		2,994	1,387	715	31,037	36,133
Net Book Value						
At 31 December 2024	<u>191</u>	<u>890</u>	55	248	33,099	34,483
At 31 December 2023	191	540	145	<u>292</u>	32,997	34,165

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

7. TANGIBLE FIXED ASSETS (Continued)

Company	Land	Machinery & Fixtures & Fittings	Computer Equipment	Motor vehicles	Build & Habitats	Total
	€′000	€′000	€′000	€′000	€′000	€′000
Cost:						
At 1 January 2024	191	2,387	1,442	390	41,223	45,633
Additions	-	40	-	-	2,779	2,819
Disposals					(103)	(103)
At 31 December 2024	191	2,427	1,442	390	43,899	48,349
Depreciation:						
At 1 January 2024	-	2,177	1,297	316	22,908	26,698
Charge for financial year	-	76	90	32	3,428	3,626
On disposals					(103)	(103)
At 31 December 2024		2,253	1,387	348	26,233	30,221
Net Book Value						
At 31 December 2024	<u>191</u>	174	55	<u>42</u>	17,666	18,128
At 31 December 2023	191	<u>210</u>	145	74	18,315	18,935

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

8. FINANCIAL ASSETS

Company	2024	2023
	€′000	€′000
At beginning and end of financial year	500	500

The Society's financial asset comprises its investment in Fota Wildlife Park CLG ("Fota"), a company limited by guarantee. Fota is accounted for as a subsidiary undertaking as the Society is a member of Fota Wildlife Park CLG and has the power to appoint a majority of the Governors of the Fota Board.

Details in respect of Fota are set out below:

Name and registered office	Country of Incorporation	Principal activity
Fota Wildlife Park CLG Carrigtwohill Co. Cork	Ireland	Operation of a wildlife park for exhibition and conservation of wildlife worldwide

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

9. STOCKS

	•	Group	C	ompany
	2024	2023	2024	2023
	€′000	€′000	€′000	€′000
Shops	303	365	185	224
Consumables		24		24
	303	389	185	248

10. DEBTORS

	Gre	Group		pany
	2024	2023	2024	2023
	€′000	€′000	€′000	€′000
Amounts falling due within one year:				
Trade debtors	808	2,416	782	2,424
Prepayments and other debtors	697	606	533	410
VAT	43	283	-	-
	1,548	3,305	1,315	2,834

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

11. CREDITORS: (Amounts falling due within one year)

	Gr	oup	Com	pany
	2024	2023	2024	2023
	€′000	€′000	€′000	€′000
- L 10	4	0.66	4.050	0.4=6
Trade creditors	1,659	2,667	1,368	2,176
Accruals	1,035	753	642	355
Deferred income	2,987	3,211	1,999	2,445
PAYE/PRSI	229	175	177	126
VAT	157	362	157	362
	6,067	7,168	4,343	5,464
Lemur fund	-	12	-	12
Conservation fund	142		142	
	6,209	7,180	4,485	5,476

The conservation fund relates to the conservation euro which was donated by members of the public when purchasing their ticket for entry during 2024. The fund will be spent on conservation related projects in 2025-2026.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

12. GOVERNMENT GRANTS DEFERRED CREDIT

Group	2024 €′000	2023 €′000
Grants received:		
At beginning of financial year	9,878	6,865
Received during the financial year	3,000	3,013
At end of financial year	12,878	9,878
Amortisation:		
At beginning of financial year	1,434	817
Amortised to Income and Expenditure	839	617
At end of financial year	2,273	1,434
Net book amount	10,605	8,444

Government grants are amortised over the same period as the related asset is depreciated.

Grant funding received from the Office of Public Works in 2024 and 2023 was used in the following capital projects:

Dublin Zoo 2024 OPW Grant – Solar panels, Kaziranga trail works and other habitat works

Fota Wildlife Park 2024 OPW Grant – Solar panels, Giraffe House refurbishment and remaining costs in relation to the Education, Conservation & Research Centre.

Dublin Zoo 2023 OPW Grant – Society House restoration and Aye-Aye, Tiger and Rhino Habitat works. Fota Wildlife Park 2023 OPW Grant – Education, Conservation & Research Centre.

Grants received to date of €200,000 from SECAD are subject to terms and conditions and if these are not adhered to, SECAD reserves the right to deem the contract to be invalid and all grant aid shall be immediately repayable. SECAD Partnership

CLG, a local development company, is a dynamic and pioneering social enterprise which works in partnership with diverse stakeholders to provide services, facilities, and investments for the benefit of the communities it serves and on behalf of a number of funding authorities such as Irish Government Departments and State Bodies.

Company	2024	2023
	€′000	€′000
Grants received:		
At beginning of financial year	6,030	4,030
Received during the financial year	2,000	2,000
At end of financial year	8,030	6,030
Amortisation:		
At beginning of financial year	747	198
Amortised to Income and Expenditure	671	549
At end of financial year	1,418	747
Net book amount	6,612	5,283

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

13. RETIREMENT BENEFIT SCHEMES

Group

Defined contribution scheme

The Group operates a defined contribution retirement benefit scheme for all qualifying employees. The total expense charged to income and expenditure in the financial year ended 31 December 2024 was €311,932 (2023: €196,734).

Defined benefit pension scheme

The Group operates a defined benefit pension scheme. Pension costs for the defined benefit pension scheme members are assessed in accordance with the advice of independent qualified actuaries using the projected unit method.

The most recent actuarial valuation of the Group's pension scheme was carried out as at 1 April 2022. An updated valuation will be carried out in 2025.

The financial assumptions used to calculate the value of the defined benefit pension scheme's liabilities under FRS 102 are:

	2024	2023
	%	%
Rate of general increase in salaries	2.8	3.2
Rate of increase in pensions in payment	0.0	0.0
Discount rate of scheme liabilities	3.4	3.15
Inflation	2.2	2.6

Mortality

No mortality table used pre-retirement (all members assumed to survive to NRA). Post-retirement tables used are 62% PNML 00 (Males) and 70% PNFL 00 (females) plus allowance for future mortality improvements.

Expected Lifetime

The expected lifetime of a participant who is aged 65 and the expected lifetime (from the age 65) of a participant who will be aged 65 in 25 years are shown in years below based on the above mortality tables

AGE	Males	Females
65	23.9	25.0
65 in 15 years	<u>25.8</u>	<u>26.5</u>

Pension Asset

Amounts recognised in the income and expenditure account in respect of the defined benefit pension scheme is as follows:

	2024 €′000	2023 €′000
Current service cost	(18)	(26)
Net interest income	13	11
	(5)	(15)
Recognised in other comprehensive income		
Actuarial gain on pension asset	114	-
Movement in asset ceiling	(80)	
Total charge relating to defined benefit scheme	(5)	(15)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

13. RETIREMENT BENEFIT SCHEMES (Continued)

The amount included in the balance sheet arising from the group's obligations in respect of its defined benefit retirement scheme is as follows:

	2024 €′000	2023 €′000
Fair value of assets	2,678	2,864
Present value of defined benefit obligations	(2,301)	(2,517)
Asset ceiling	(377)	(347)
Net asset recognised in the balance sheet	-	

In assessing the carrying value of the defined benefit asset, the Directors have assessed what value is recoverable by the company in the foreseeable future. On that basis, the value of the asset has been reduced to €Nil.

Movements in the fair value of scheme assets were as follows:

	2024 €′000	2023 €′000
At 1 January	2,864	2,616
Contributions	115	113
Benefits paid	(196)	(100)
Expected return on pension scheme assets	89	96
Actual return less expected return on pension scheme assets	(194)	139
At 31 December	2,678	2,864

Movements in the present value of defined benefit obligations were as follows:

	2024	2023
	€′000	€′000
At 1 January	2,517	2,382
Service cost	18	26
Interest cost	76	85
Benefits paid	(196)	(100)
Actuarial (gain) / loss on pension scheme obligations	(114)	124
At 31 December	2,301	2,517
The analysis of the scheme's assets at the balance sheet date was as follows:		

	Fair value at	Fair value at
	31 December	31 December
	2024	2023
	€′000	€′000
Bonds	2,678	2,852
Other		12
Total market value of assets	2,678	2,864

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2024

14. FINANCIAL INSTRUMENTS

The carrying values of the Group's financial assets and liabilities are summarised by category below:

	2024	2023
	€′000	€′000
Financial assets		
Measured at undiscounted amount receivable		
• Trade debtors (Note 10)	808	2,416
	2024	2023
	€′000	€′000
er		
Financial liabilities		
Measured at undiscounted amount payable Trade payables (Note 11)	1 650	2.667
• Trade payables (Note 11)	1,659	<u>2,667</u>
The carrying values of the company's financial assets and liabilities are summarised by category	below:	
	2024	2023
	€′000	€′000
Financial assets		
Measured at undiscounted amount receivable		
Trade debtors (Note 10)	<u>782</u>	2,424

	2024 €′000	2023 €′000
Financial liabilities		
Measured at undiscounted amount payable		
•Trade and other payables (Note 11)	1,368	<u>2,176</u>
15. CASH FLOW STATEMENT		
Reconciliation of operating surplus to cash generated by operations		
	2024	2023
	€′000	€′000
Operating (deficit)/surplus	(649)	131
Depreciation of tangible fixed assets	4,454	4,146
Amortisation of government grants	(839)	(617)
Loss on disposal of tangible fixed assets	-	188
Decrease/(increase) in stocks	87	5
Decrease / (increase) in debtors	1,757	(2,306)
(Decrease)/increase in creditors	(972)	457
Cash generated by operations	3,838	2,004
16. COMMITMENTS AND CONTINGENCIES		
	2024	2023
	€′000	€′000
Authorised and contracted for commitments	151	1,530
Authorised but not contracted for commitments	8,303	667

As at the year-end date, the Board has authorised specific capital projects to the value of €11m, to progress to the planning stage.

17. TAXATION

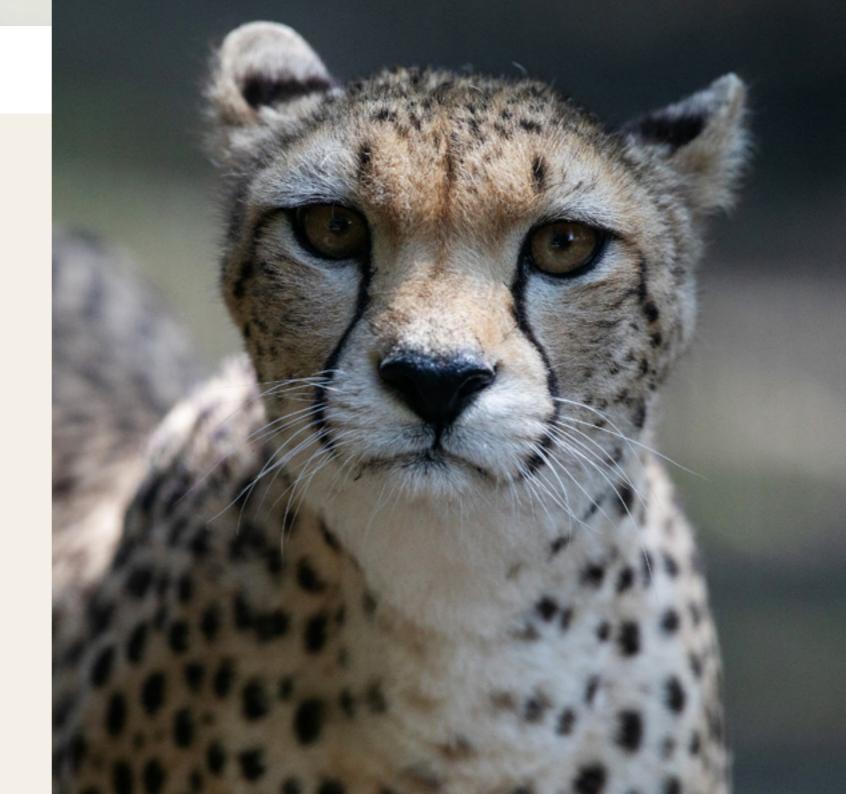
No liability to taxation arose during the financial year as the Society is exempt from corporation tax.

18. COMPARATIVE BALANCES

Certain comparative balances have been reclassified on a basis consistent with the current year presentation.

19. POST BALANCE SHEET EVENTS

No post balance sheet events noted.



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Photography by Patrick Bolger and Dublin Zoo Team

Design by Wilson Creative