



CONSERVATION STRATEGY

— 2023 - 2030 —

Twycross Zoo is run by the East Midland Zoological Society (EMZS).
Registered Charity No. 501841



Our Vision

To educate and inspire people to care about and therefore save the other species with which we share our planet. To become a recognised “centre of excellence” that makes a significant contribution to the welfare and conservation of animals, especially primates, as a conservation charity and zoo.

Our Mission

To lead the global conservation efforts in captive breeding of endangered species whilst supporting efforts to protect wild populations. To deliver STEM agenda training and jobs at an international level to create the next generation of conservation leaders. To become a major national attraction as a charity zoo with over one million visitors annually, generating sufficient revenue to be financially stable and able to support the development of world-class animal habitats on site.



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Introduction

Twycross Zoo opened in May 1963 and became a registered conservation charity in 1972, with a mission to support the preservation of species.





In 2023, the zoo celebrates 60 years of contributions to conservation, and in the **past ten years** has:

- Bred 72 different species of mammals, birds, and reptiles
- Created new animal habitats for endangered chimpanzees (2018), black rhino (2019), and Sumatran tigers (2019)
- Contributed more than £450,000 towards the work of global conservation organisations
- Inspired over 500,000 school students and their teachers about the natural world
- Facilitated 565 research projects and contributed to more than 140 scientific publications
- Welcomed over 5,000,000 visitors.

One million animal and plant species are on the brink of extinction and the global climate is changing due to human activities. In response to this, zoos are challenged to critically evaluate their activities, and assess their impact on global conservation. The need to be efficient with conservation resources and engage in collaborative work is greater than ever.

Collaborative working has been key to Twycross Zoo's previous success. As one of the founding members of the British and Irish Association of Zoos and Aquaria (BIAZA), Twycross Zoo is also an active member of the European and Worldwide Associations of Zoos and Aquaria (EAZA and WAZA) and is involved in defining best practice in specialisms such as animal husbandry, welfare, conservation education, veterinary care, population management and *in-situ* conservation.

As a **science led organisation**, Twycross Zoo has always valued university collaborations. One of the zoo's founders, Molly Badham MBE, was awarded an Honorary BSc degree by the University of Leicester in 1982 for her use of

science to inform best practice in welfare and husbandry. Since then, Twycross Zoo's university collaborations have grown from strength to strength. In 2021, Twycross Zoo and Hinckley and Bosworth Borough Council, supported by eight UK universities, were awarded significant funding from the UK Government's Levelling Up Fund, to develop a National Science and Conservation Centre (NSCC) to advance teaching, research, and community collaboration towards conservation solutions.

The zoo's future activities will be guided by this Conservation Strategy 2023 – 2030 which is in alignment with the BIAZA conservation policy and the EAZA conservation standards, whilst also considering it's contribution to the targets of the Kunming-Montreal Global Biodiversity Framework and the Sustainable Development Goals.



Our six conservation goals:



Goal One

Supporting *ex-situ* populations



Goal Two

Protecting wild species and habitats



Goal Three

Inspiring positive change for wildlife



Goal Four

Enhancing the value of zoos for nature and society



Goal Five

Caring for our UK ecosystems



Goal Six

Become environmentally sustainable



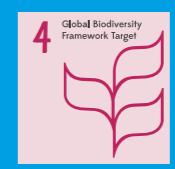
We adopt the conservation definition set out by the International Union for Conservation of Nature (IUCN) as “the protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence.”

When defining what constitutes as a direct contribution to conservation, we follow the guidance set out by EAZA which may include the “donation of time, expertise, monies, materials and/or in-kind support that is aiming to secure long-term populations of species in natural ecosystems and habitats.”



Goal One

Support the maintenance of healthy *ex-situ* populations of managed species, with a focus on threatened primates and species with a conservation breeding role



At the beginning of 2023, Twycross Zoo cared for 1,000 animals across more than 80 species, with 55% of them being part of carefully managed EAZA *Ex-situ* Programmes (EEPs) within the EAZA framework. Only with a collaborative effort can viable populations be managed, to help secure a safe future for the many threatened species with which we share our planet. EEPs for several species, including black and gold howler monkeys, siamang, pileated gibbons and Ecuadorian Amazon parrots, are coordinated by Twycross Zoo staff.

Twycross Zoo has a long history with our closest relatives, the great apes. We are one of only a handful of zoos in the world to care for all four species and the only zoo in the UK. Twycross Zoo staff currently sit on EEP species committees for three out of the four great apes.

Recognising the resources that we have, and the hands-on role

that zoos play in the conservation of threatened species, we are committed to increasing the number of EEP species housed at Twycross Zoo to 75% by 2030, with 60% of species listed as at least 'Vulnerable' by the IUCN Red List.

To ensure we are maximising our conservation impact with the animals we have on site, we have produced a new Species Planning Tool. This allows us to critique and compare species, scoring categories such as: how species can help educate visitors about changing behaviours at home to benefit wild habitats; whether research with zoo animals can help their wild counterparts, as well as, how we can best use our skills, knowledge, and funds, to support wild populations. By using this to assess all current and potential new species, it will be clear where to best focus our attention.

"BY 2030, WE WILL HAVE INCREASED THE NUMBER OF EEP SPECIES HOUSED AT TWYCROSS ZOO TO 75%, WITH 60% OF SPECIES LISTED AS AT LEAST 'VULNERABLE' BY THE IUCN RED LIST"



Bonobos: Caring for 10% of the European population at Twycross Zoo

A species first recognised as recently as 1929, bonobos are the least well-known of the great apes. Found south of the Congo River in the Democratic Republic of the Congo it is estimated that wild populations of this Endangered species number in the region of only 15,000 – 20,000 animals (IUCN, 2012).

With a well-managed *ex-situ* population in the EAZA region, Twycross Zoo has participated in the bonobo EEP since the first animals arrived at Twycross Zoo in March 1992. Since then, 17 births have been recorded at Twycross Zoo, contributing to the European population, and 24 transfers between other participating zoos have been completed. These transfers follow recommendations made by the EEP coordinator to ensure good genetic management in order to maintain a viable

population in captivity. At the beginning of 2023 Twycross Zoo was home to 14 bonobos, including a one-year-old infant. With a population numbering approximately 150 individuals in 11 zoos across Europe, Twycross Zoo has responsibility for almost 10% of the European population.

Remaining the only UK zoo to care for bonobos, Twycross Zoo is uniquely positioned to educate its visitors about the importance of protecting bonobos for future generations, raising awareness of the challenges they face in the wild and providing research opportunities to partner universities. Visiting PhD, Masters and undergraduate students participate in varied observational, cognitive and comparative studies to further our understanding of one of our closest relatives.





Goal Two

Build conservation resources and capacity at Twycross Zoo and in animal range countries to support the preservation of wild populations and their habitats



As a conservation charity and zoo, our overarching aim is to save the species with which we share our planet. This goal reflects our activities in partnership with conservation organisations based in animal range countries, who work to reduce threats to wildlife and preserve habitats. Since 2006 our conservation fund has supported over 65 projects globally. Moving towards 2030 we will focus our efforts on the four great apes and the EEP species that we coordinate, and aim to **annually increase the financial support** offered to this cause.

Previously known as the 'Conservation Welfare Fund', in 2022 we re-launched our *In-situ* Conservation Fund to facilitate and evaluate our work with partners who we support through financial assistance, skills and expertise sharing, and capacity building. Each partnership works towards objectives, including monitoring and protecting wild populations, inspiring behaviour change that may reduce species threats, and empowering people by enabling sustainable livelihoods that better facilitate their coexistence with wildlife.

We will continue to enable our staff from diverse teams across the organisation to add value to *in-situ* conservation of wild populations through direct contribution of time and expertise. By 2030 we aim to have enabled at least 20 employees to support the work of our international conservation partners through skills sharing and capacity building. We will monitor and evaluate the projects we support on a regular basis, to ensure we are delivering for wildlife, and remain flexible to the changing needs of our partners.

By 2030 we aim to have increased the awareness of our *in-situ* conservation work, by promoting conservation success stories through our events, our communication strategies, and across our site in educational interpretation. **By 2030 our conservation talks will be reaching 2,500 people per year** and stories from all our conservation partners will be communicated regularly on site and through our marketing channels.

“BY 2030, WE WILL HAVE ENABLED AT LEAST 20 EMPLOYEES TO SUPPORT THE WORK OF OUR INTERNATIONAL CONSERVATION PARTNERS THROUGH SKILLS SHARING AND CAPACITY BUILDING”

Rehabilitating spider monkeys in Belize with Wildtracks

Spider monkeys play an important role in the Belize forest ecosystem through seed dispersal and ecotourism, yet the Central American spider monkey is one of the world's 25 most endangered primate species. The population is rapidly declining as a result of deforestation, forest fragmentation and the illegal wildlife trade. Since 2019, Twycross Zoo has supported the work of Wildtracks, a Belize-based non-profit organisation that works with local primate rehabilitation staff, community participants, conservation NGO partners and Wildlife Officers of the Belize Forest Department in the conservation, monitoring and assessment of primate populations.

Wildtracks also works to rehabilitate animals that are injured or confiscated from the illegal wildlife trade by the Belize government. Following a 95% success rate of introducing Endangered black howler monkeys in Belize, Wildtracks is now building capacity for release and ongoing monitoring of rehabilitated spider monkeys in the country's protected Northeast

Biological Corridor – Belize's first rewilding of forests with essential large seed dispersers for increased resilience to climate change.

Twycross Zoo has supported this work not only financially, but through the provision of veterinary expertise and time, supporting and developing capacity for pre-release health assessments for rehabilitated spider monkeys, to ensure that these meet international standards. Alongside this, Twycross Zoo supported funding for satellite collars to assist long-term monitoring efforts, and equipment to allow videos and photos to be collected to help showcase the successful release and wider conservation work of Wildtracks to the global audience.

In 2023, Twycross Zoo will support Wildtracks to develop and disseminate a replicable model for successful primate rehabilitation and reintroduction, providing a conservation tool for primate rehabilitation facilities and wildlife management authorities in the region.





Goal Three

Deliver conservation education to promote positive behaviour change for wildlife conservation



Conservation education at Twycross Zoo aims to inspire, engage and connect people to the natural world. We strive to provide everyone with an opportunity to experience wildlife. To achieve this, we provide a comprehensive, balanced and holistic educational curriculum that caters to all zoo visitors, schools, colleges and universities as well as extending our conservation education provision out into local communities, internationally and online.

Our informal conservation education curriculum aims to increase public knowledge of biodiversity, make conservation relevant to people's lives and challenge misconceptions about conservation. In 2022, we delivered talks to 61,880 people (11% of visitors).

By 2030, we aim to have 20% of our interpretation including conservation messaging and 30% of visitors attending zoo talks. We will ensure that 80%

of visitors engage with some form of conservation education.

Our formal conservation education curriculum provides students the opportunity to consolidate their learning outside of the school classroom. Our intent is to provide stimulating, fun, and immersive sessions and workshops. In 2022, we welcomed 8,351 students to our formal sessions and 19,728 students came on a self-led school visit. By 2030, we aim to have welcomed a cumulative 205,000 school students to Twycross Zoo and to have enrolled 1,440 students onto new undergraduate and postgraduate courses, codeveloped with university partners as part of the NSCC.

By 2030, we will have strengthened the reputation and effectiveness of the Conservation Education Department through the enactment of a quality assurance process, and contributed to peer reviewed literature that demonstrates the value and future potential of conservation education to the wider community.

**“BY 2030, WE WILL HAVE
WELCOMED 205,000
SCHOOL STUDENTS TO
TWYCROSS ZOO”**

Supporting Borneo Nature Foundation, Indonesia, to protect orangutans

Borneo Nature Foundation (BNF) is a not-for-profit conservation organisation working to protect many important areas of tropical rainforest and safeguard the wildlife, environment, and indigenous culture of Borneo. Twycross Zoo are supporting BNF's conservation education programmes that aim to provide children with an appreciation for nature, and the knowledge and tools to enable them to become facilitators of future change. This consists of activities in school classes, forest visits, community education sessions, and exhibitions of the children's work. The school classes are aimed at 9-11 year olds, and the teaching materials are developed in collaboration with Indonesian teachers to ensure that they are of a high standard.

A key focus area for the education programme is Mungku Baru Village, located in the Rungan landscape, home to the largest population of non-protected Bornean orangutans. BNF also support villagers to create sustainable livelihoods that work in harmony with the forest and peatland landscape to reduce the threat to biodiversity.

In 2023, Twycross Zoo will increase support for BNF, utilising our own education team to help develop bespoke materials for a new teacher training programme, to increase capacity in delivering activities to more schools and villages. We will also help support the BNF education team in delivering and evaluating these activities to ensure that they are having the desired impact.



Inspiring action for zebras

On a local scale, Twycross Zoo run educational activities during international animal days, and between 28th January to 5th February 2023, we held a range of zebra themed activities to celebrate international zebra day. We had the overall aim of celebrating zebras and increasing public awareness of the species, and specifically wanted to engage with members of the public, promote a connection to zebras and increase understanding of how we care for zebras. At Twycross Zoo we carried out a range of activities including an art mural that people could contribute to using their handprint,

a zebra bingo game, a camouflage demonstration, a conservation game as well as a specific zebra talk.

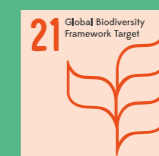
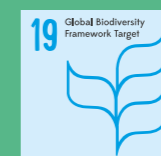
During the nine-day event 18.2% of zoo visitors engaged with the activities. We found that the mural was the most popular activity with over 1,500 participants. This activity was an opportunity to have meaningful conversations with visitors about zebras and also contributes to the aesthetics of the zoo. Overall, 93% of participants claimed to have learnt something new about zebra after these activities.





Goal Four

Enhance the value of zoos for society and wildlife conservation by action, and through influencing relevant regional and national policy



The future of conservation zoos relies on collaboration and working together to achieve maximum impact, as does the future regeneration of our planet. In support of this goal, Twycross Zoo facilitates and enables our staff to be active members of BIAZA and EAZA working groups and committees, currently filling almost 40 roles. By 2030, we aim to increase this to at least 60 roles to ensure that Twycross Zoo is well represented and has valuable input into influencing, contributing, and enhancing the collective zoo voice. We will continually conduct gap analyses to ensure that we are inputting where we can and supporting the work of progressive conservation zoos. We will also continue to play our part by tying into campaigns and initiatives that our associations deliver, helping them achieve maximum impact.

We will support and input where possible into future zoo policy and legislation, including zoo licensing, and more broadly any legislation

with the potential to impact our organisational sustainability. Further to this, Twycross Zoo will support initiatives and policies that aim to have a positive impact on wildlife conservation and recovery both in the UK and abroad. Our aim is to **become more active in communicating the benefits and challenges of conservation, to a wider audience** including our local MPs, business support organisations and industry outside of the zoo and conservation sectors, to ensure that zoos' collective voice is heard, and priorities are realised.

We will actively look for funding and opportunities to support projects that benefit the wider community and highlight the diverse benefits of zoos to society, though **involvement in green social prescribing and projects** that have an impact on positive human mental and physical health by provision of access to green and blue spaces.

“BY 2030, WE WILL HOLD 60 ROLES IN BIAZA, EAZA AND WAZA TO ENSURE THAT TWYCROSS ZOO IS ACTIVELY SUPPORTING OUR ZOO ASSOCIATIONS”

Showcasing the value of zoos to society

To enable new partnerships, collaborations, funding, sponsorship and volunteering opportunities Twycross Zoo is represented on a number of boards including East Midlands Chamber of Commerce and Leicester and Leicestershire Enterprise Partnerships (LLEP's) Innovation Steering group. Representation provides Twycross Zoo with opportunities to engage, inform, share and shape businesses and professional stakeholders' perceptions on the essential role of modern conservation-led zoos. In Spring 2023, Twycross Zoo hosted two high profile social 'green' business events.

The **'Connecting with Nature & Animals: Generation Next Social at Twycross Zoo'** event on the 30th of March attracted 23 professionals from diverse business organisations including the charity sector as well as accountancy firm, marketing, design and media companies. The

event was hosted by our senior leadership and education teams and has resulted in engaging and active promotion of Twycross Zoo and our conservation focus via social media, education staff being invited to become Generation Next conservation ambassadors, and a four page Twycross Zoo feature in the Chamber of Commerce quarterly magazine (May 2023) which is distributed digitally to four thousand members.

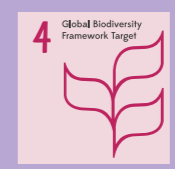
The **Leicestershire Business Voice (LBV) Conservation 'Netwalking' at Twycross Zoo for Mental Health** event on the 27th of April attracted professionals, senior leaders and managers from legal, banking and the insurance sector as well as self-employed consultants. Twycross Zoo and our conservation role and focus was actively promoted via social media (pre and post the event) to an audience, who would not normally have visited the zoo.





Goal Five

Conserve UK native wildlife and habitats on our site and beyond and support key UK environmental initiatives



Whilst we are working hard to protect and preserve the exotic species we share our planet with, we recognise that the biodiversity crisis is very much being felt within the UK as well. As an organisation with skills and staff dedicated to conservation, we are in a unique position to help support native species preservation. This starts with ensuring that we are managing our land with biodiversity in mind.

Twycross Zoo is home to a 6-hectare wetland nature reserve, featuring a 19 pond reed bed system that filters waste water from the zoo, utilising natural ecological processes. This was set up in line with our long-term sustainability strategy and to create a unique wetland habitat in a primarily agricultural landscape to support native biodiversity. As part of our commitment to native species conservation we pledge to increase the amount of land we actively manage and protect 30% of our

land for wildlife, by 2030. We have undertaken a conservation skills audit and are working on a programme of activities to upskill our own teams in areas including wildlife surveying and habitat management. We aim to train 20 members of staff each year with specific field conservation skills, and enable one member of staff each year to work towards a conservation planning qualification. **By 2030 we will have 5 full time *in-situ* conservationists.**

We aim to support local native species and habitat recovery programmes where appropriate, working with our local Wildlife Trusts and other UK conservation organisations. Our ecologist is currently working to support further understanding of the remaining habitats across Leicestershire, and where appropriate we will support captive breeding, release, and ongoing monitoring to aid the recovery of native UK species.

“BY 2030, WE WILL ACTIVELY MANAGE AND PROTECT 30% OF OUR LAND FOR WILDLIFE AND HAVE TRAINED 5,000 NATIVE SPECIES CHAMPIONS”

Enhancing butterflies and native biodiversity on our zoo site

Butterflies are an important indicator of environmental health; they are particularly susceptible to climate change, habitat loss and fragmentation. More than half of UK native butterfly species are under threat (Butterfly Conservation, 2022). In recognition of the importance of monitoring butterfly populations nationally, Twycross Zoo has been working with Butterfly Conservation to set up a transect in our own Nature Reserve to record butterfly species presence and abundance to contribute to the national database.

In 2023 we expanded our focus and established surveys for multiple taxa, to feed into our Biodiversity Action Plan (BAP) for the Twycross Zoo Nature Reserve. This action plan will evaluate the habitats, animal and plant species

and carry out actions to protect and enhance them as part of on-going management. **By 2030 we aim to have increased species diversity in the Twycross Zoo Nature Reserve and have well established, longitudinal monitoring schemes for all taxonomic groups that contribute to the relevant national databases and engage 20% of our permanent staff.**

In 2024 we will create a BAP for the wider zoo site and invite our communities to get involved with our programmes to protect nature as part of our green volunteering scheme. **By 2030 we aim to have trained 5,000 native species community champions** to work alongside our own staff and other local nature conservation organisations.





Goal Six

Become a sustainable organisation and minimise our contribution to global climate change



Twycross Zoo is a conservation charity striving to have a positive impact on the environment, people, and the communities that we serve. We comply with all relevant environmental legislation and associated guidance and will follow the precautionary principle to prevent environmental pollution and endeavor to continually evaluate and improve our environmental performance. We work towards minimising the use of non-renewable resources and aim to be a positive influence by communicating and sharing our sustainability values with visitors, stakeholders and the wider community.

Our main areas of focus and 2030 commitments are:

- To recycle over 50% of the waste generated on site by introducing additional facilities and improving our infrastructure
- To ensure that our suppliers have sustainable credentials, to amalgamate suppliers across all areas of the zoo, and to reduce the number of deliveries to site by 25%
- To reduce energy usage with the introduction of alternative methods including solar energy, heat pumps and energy efficient lighting
- To ensure that all visitors see or hear a messaging when visiting the site about the benefits of waste recycling, composting and waste reduction.

By implementing these initiatives and encouraging visitors to participate, we can reduce customer generated waste at Twycross Zoo while promoting environmental sustainability. Not only will this be beneficial for the environment, but it can also enhance the visitor experience and strengthen our reputation as a socially responsible organisation.

“BY 2030, WE WILL RECYCLE OVER 50% OF THE WASTE GENERATED AT TWYCROSS ZOO, BY INTRODUCING ADDITIONAL FACILITIES AND IMPROVING OUR INFRASTRUCTURE”

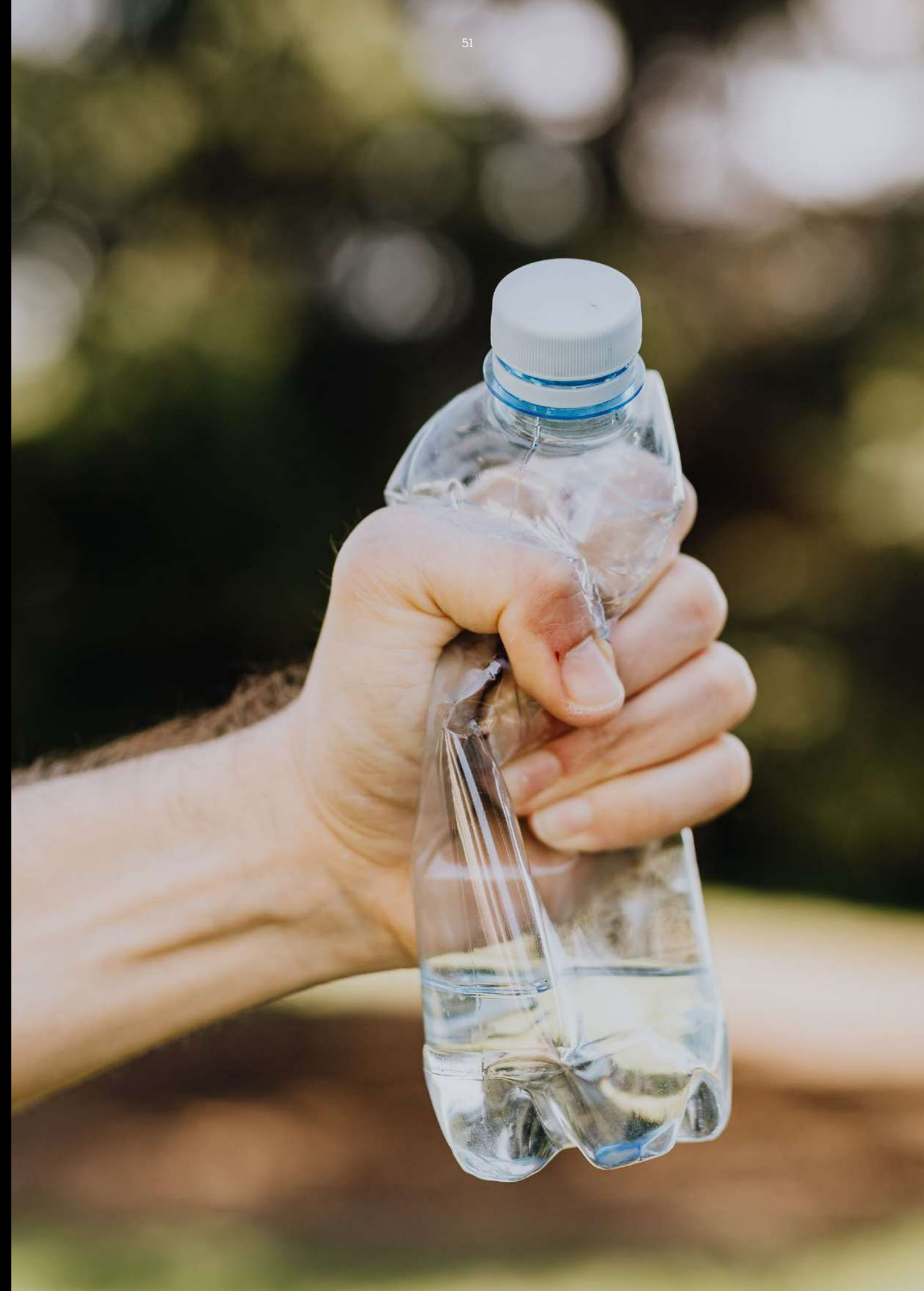
Improving our waste and recycling

In 2022 we welcomed nearly 600,000 visitors which generated 145 tonnes of waste. Due to a number of constraints, less than one quarter of it (19% - 28 tonnes) was recycled. Zero waste went to landfill with 117 tonnes used for energy recovery. Although diverting waste from landfill is deemed more positive for the environment there can be pollution caused by energy recovery.

The following measures were taken in the second half of 2022, to support an increase in the volume of our waste recycled during 2023 and beyond, including the introduction of:

- Dry, mixed recycling to make it easier to recycle waste generated by the retail, operational and catering teams
- Food waste recycling, which diverts food waste away from general waste
- Glass recycling
- Plastic bottle recycling bins across site and reducing the number of general waste bins
- Mixed recycling bins in all staff areas.

In response to this and further waste reduction efforts, we have seen a 12% increase in recycling year on year (Q1 2022 13% VS Q1 2023 25%) and an 8 tonne reduction in waste between 2022 and 2023. Although still early in our journey, the measures put in place are working and we are seeing the required improvements - as we introduce more waste reduction measures, we hope to see further success.



CONSERVATION STRATEGY

— 2023 - 2030 —



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