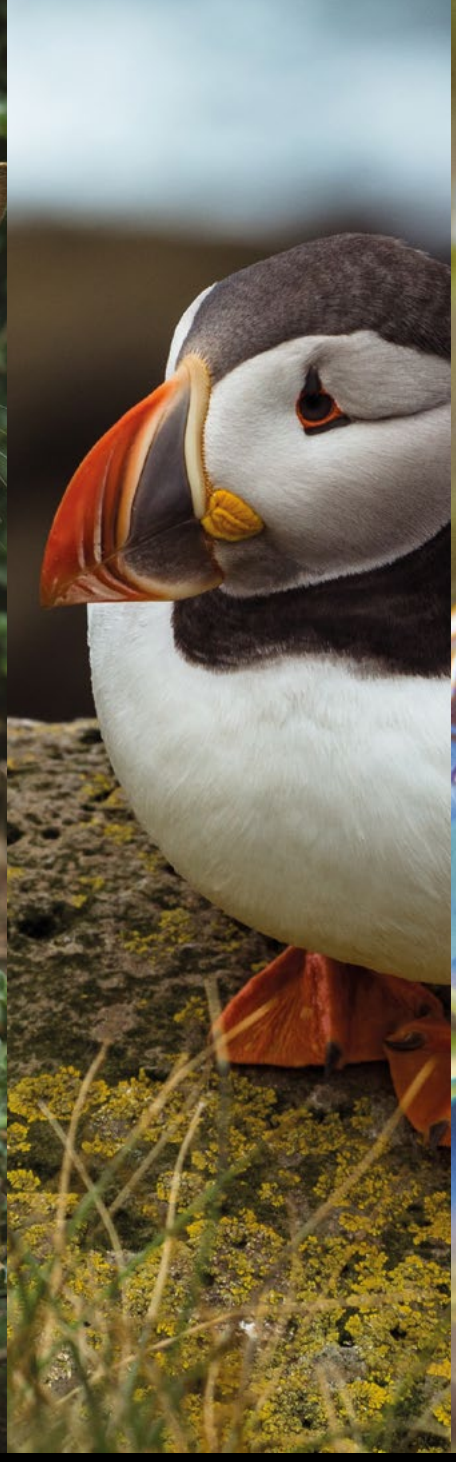

More Than
You Think

The Integral role of Zoos and Aquariums in our Communities

The British and Irish Association
of Zoos and Aquariums

BIAZA
BRITISH & IRISH ASSOCIATION OF ZOOS & AQUARIUMS

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More Than You Think!

From Newquay to the Scottish Highlands, and from Belfast to Hull, BIAZA zoos and aquariums are deeply rooted in the vibrant communities around them.

Beyond being among the most visited tourist attractions in the country, with 32 million visitors to UK zoos and aquariums in 2023[1]; they serve a pivotal role in connecting local communities with our natural environment.

These institutions foster projects that ensure nature's recovery, restore green and blue spaces, encourage the return of native wildlife, enhance the mental and physical wellbeing of local residents, and provide invaluable resources for conservation and sustainability education.

Through this work, BIAZA zoos and aquariums are making a large contribution to the UN's Sustainable Development Goals (SDG) and the targets set by the Post-2020 Global Biodiversity Framework (GBF), in addition to national targets such as those outlined in the Environmental Improvement Plan.

This report will set out six key areas where BIAZA zoos and aquariums are positively impacting local communities across the country:

Flock of Jackdaws flying above Slimbridge at sunset, WWT
©James Lees

Conservation in the Community

BIAZA zoos and aquariums across the UK are leading nature recovery initiatives, working hand-in-hand with their local communities to restore over 100 native species of animals and plants that have become locally or nationally extinct, including beavers, harvest mice, black-tailed godwits, red-billed chough, and white-clawed crayfish, alongside conserving thousands of hectares of vital habitats.

Working with local partners, including community groups, schools, mental health charities, religious groups, refugee groups, allotment keepers, and fellow wildlife charities, our zoos and aquariums are empowering local people to design, build, take ownership of, recover, and connect with nature on their doorstep. Furthermore, our zoos and aquariums are utilising this extensive conservation expertise to assist the UK Government and devolved administrations on their national nature and biodiversity recovery programmes and are collaborating with local authorities in the planning and implementation of Local Nature Recovery Strategies.

Education and Outreach

BIAZA zoos and aquariums are hubs of education, collaborating extensively with schools and colleges in the regions around them to deliver curriculum initiatives on conservation and sustainability. This goes well beyond a traditional zoo or aquarium visit, with many organisations running extensive schools outreach programmes, taking nature recovery and sustainability campaigns into the classroom and working with teachers to magnify the impact.

In the UK, BIAZA zoos and aquariums are an indispensable educational resource which play a pivotal role in fostering a deeper connection between people and the natural world. They prepare individuals for future careers in conservation, instil empathy and responsibility toward the environment, and raise awareness about pressing conservation issues. As society grapples with an increasing disconnect from nature, these institutions are vital in rekindling the bond between humans and the natural world.

Group of primary school children play with rainwater feature
©WWT Washington

Sustainability and Climate Change

Many BIAZA zoos and aquariums are at the forefront of regional sustainability and climate change initiatives.

Links with iconic animal species cared for in zoos and aquariums provide a powerful means of engaging both business and the wider public in practical solutions and behaviour change.

A particular focus on sustainable supply chains has seen BIAZA zoos and aquariums leading the way in championing procurement of products containing certified sustainable palm oil, through links with orangutans and other rainforest species, and reducing the use of single-use plastics, highlighting work with marine species such as turtles.

Great Crested Newt
©Chester Zoo

Economic growth and regeneration

Valued at £658M to the UK economy (based on 2019 figures)[2] and supporting over 11,000 jobs and nearly 5,000 volunteers, BIAZA zoos and aquariums contribute significantly to economic growth and employment.

Zoos and aquariums work in partnership with local businesses to diversify the tourist economy and, as key local businesses, many are represented on their Chambers of Commerce and Local Enterprise Partnerships, and some contribute to business enterprise initiatives and science corridors.

Cultural and Social Anchors

Many BIAZA zoos and aquariums have deep roots in their communities, serving as cultural centres with strong ties to local traditions and heritage. They preserve and celebrate the rich tapestry of our local and regional history. They also provide cultural links between people and nature and support the appreciation of our natural heritage, both on land and in the ocean.

Across the UK, BIAZA zoos and aquariums support a myriad of local community groups, charities, and cultural organisations through providing a broad range of experiences that are designed to improve the lives of local people. There is much reciprocity between providing such experiences and subsequent support for healthy natural environments.

Accessibility and Inclusion

BIAZA zoos and aquariums are providing unique opportunities and spaces for individuals of all backgrounds and abilities to connect with nature. Many BIAZA members are working with local and regional community groups to make their sites more accessible and inclusive in a variety of ways, including measures to embrace neurodiversity and special educational needs. This focus on accessibility and inclusion creates a 'bridge of access' to nature that would otherwise rule out large sections of society.

Zoos and aquariums work hard to break the link between background and success. It will take all of us, regardless of who we are and where we come from, to reverse the climate and biodiversity crises. For example, many BIAZA zoos provide specific activities for underprivileged and under-represented groups within the community, such as holiday clubs for children, gardening, art and nature related activities for the older community and socially isolated groups. Furthermore, our zoos are working in partnership with social services and the voluntary sector to contribute to initiatives to tackle poverty, social isolation and exclusion, and mental health improvement in their areas.

Through providing access to accessible green and blue spaces, as well as social prescribing via the NHS, these organisations are also having a positive impact on mental health and physical wellbeing.

Sparrowhawk
©Jean Wiltshire

Unlocking the full potential

Overall, the extensive engagement of BIAZA zoos and aquariums is invaluable to their local communities, reaching many hundreds of thousands of participants in ways that other conservation organisations might struggle to achieve. Despite their significant contributions, their role is often underestimated and overlooked.

As the new Government's policy agenda takes shape, we urge parliamentarians and decision-makers across the UK to recognise the significant value of zoos and aquariums and to consider taking the following steps to help unleash their full potential and assist local, regional, and national governments and businesses to achieve their goals for green recovery and growth:

1. Explore and champion new opportunities for collaborative community-based conservation initiatives between government and zoos and aquariums. This includes acknowledging the integral role of zoos and aquariums in future reviews of national nature recovery plans, such as National Biodiversity Strategies and the Environmental Improvement Plan.
2. Government policy must integrate considerations of nature into all sustainability efforts to address the interconnected climate and nature crises effectively. This includes considering the impact, mitigation, and opportunities to nature and biodiversity in the transition to net zero, maximising the use of nature-based solutions, and empowering people and industry to be more sustainable.
3. Give greater support for schools to provide opportunities for nature-based learning within zoo and aquarium settings to effectively meet and support curricular educational targets. These experiences can form part of the continued exposure to knowledge, understanding and emotional connection with the natural world.
4. Further recognition of the economic significance of zoos and aquariums in the context of the communities that they serve at regional and national level, through greater consultation and engagement including in regional business forums.
5. Acknowledgement of the role of zoos and aquariums as cultural spaces that are integral to our social fabric, alongside museums and galleries, and the promotion of the health and mental benefits of visiting these green and blue spaces.
6. Engage zoos and aquariums to assist Defra with their aim to improve access to nature for those with visible and hidden disabilities and to reduce health inequalities. Include zoos and aquariums as stakeholders in DCMS to promote the importance of accessible tourism.

Seagrass dive,
Wild Planet Trust
©Georgie Bull

Introduction

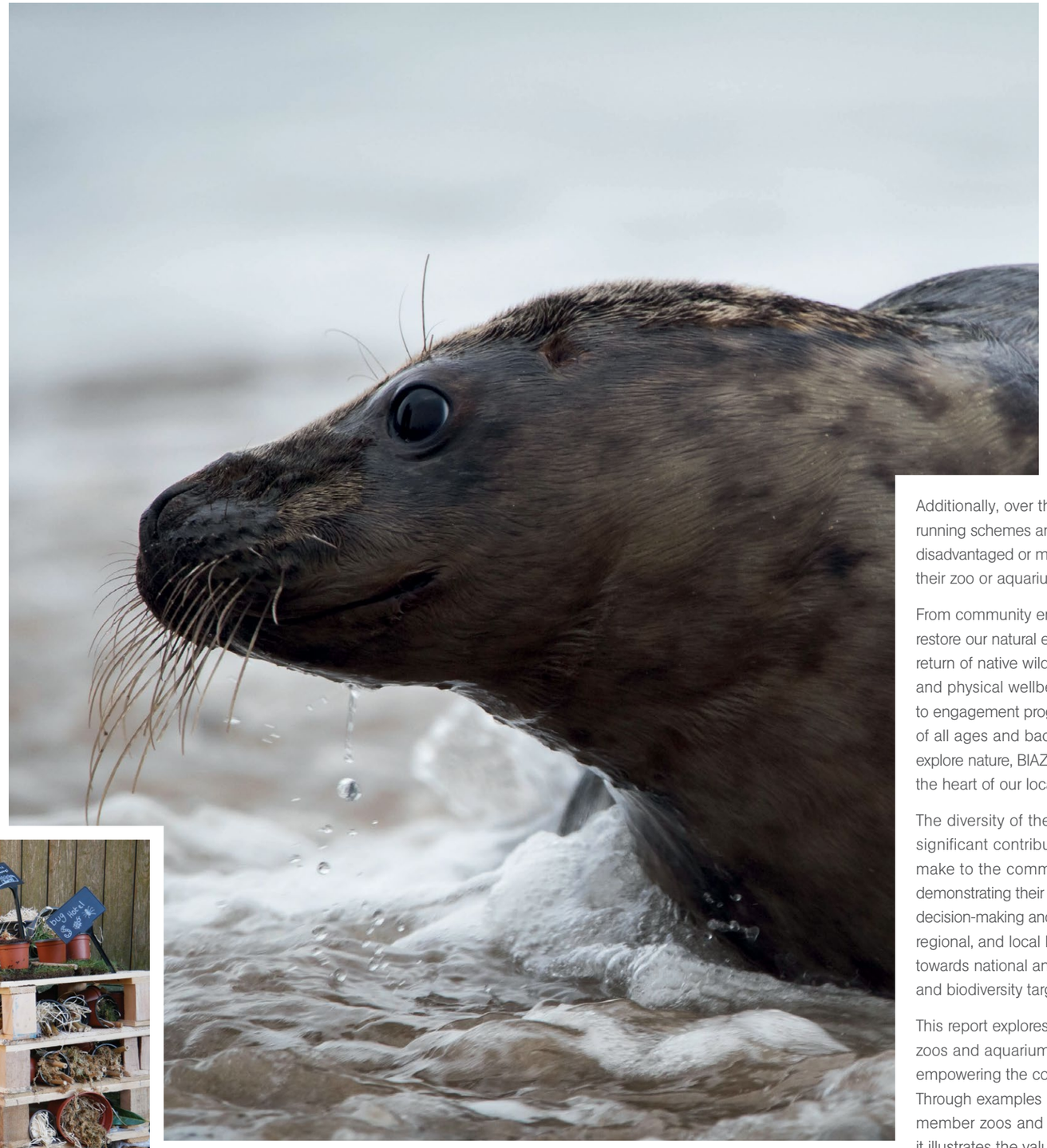
The significance of local communities as critical partners in the success and sustainability of conservation efforts has long been acknowledged.

Effective conservation should always actively involve and benefit residents living in and around the areas being protected. This approach is more likely to yield lasting, positive outcomes for both the environment and the communities themselves. Recognising this, BIAZA zoos and aquariums engage local communities in their conservation work, working together to protect habitats and recover species, both at home in the UK and in projects worldwide.

This engagement has firmly rooted BIAZA zoos and aquariums within their local communities, with much of what they deliver for conservation and society reflected in their contributions here. However, this crucial role is often underestimated, and its significance is only now beginning to be fully understood.

Traditionally, the role of zoos and aquariums was framed around the 'four pillars' of conservation, research, education, and entertainment[3], but this has rather compartmentalised their role and overlooked their broader societal impact beyond animal conservation and formal education.

More recently, a more integrated model of the societal value of zoos and aquariums has emerged, recognising the multifaceted and interconnected ways in which zoos and aquariums fulfil their objectives[4]. This includes their various roles within their local communities, as well as the national and international significance of their conservation work. A survey conducted among BIAZA members in the summer of 2023 revealed that all respondents were working proactively with their local communities. Nearly all of the same respondents (92%) reported active engagement on specific initiatives in at least one of the six categories explored within this report.



Grey Seal
©Niall Owen

Bug hotels
©Chester Zoo

Additionally, over three-quarters were running schemes and initiatives to encourage disadvantaged or marginalised groups to visit their zoo or aquarium.

From community engagement projects that restore our natural environment, encourage the return of native wildlife, and improve the mental and physical wellbeing of local residents, to engagement programmes that allow people of all ages and backgrounds to connect and explore nature, BIAZA zoos and aquariums are at the heart of our local and regional communities.

The diversity of these roles underscores the significant contribution zoos and aquariums make to the communities they serve, demonstrating their enormous potential to inform decision-making and support projects at a national, regional, and local level, including contributing towards national and international sustainability and biodiversity targets.

This report explores the crucial role that BIAZA zoos and aquariums play in supporting and empowering the communities surrounding them. Through examples and case studies from BIAZA member zoos and aquariums across the UK, it illustrates the valuable work being undertaken and presents the potential for zoos and aquariums to contribute even further to society in the future.

Conservation in the Community

- The contribution of zoos and aquariums to UN SDG 14 (life in the ocean) and 15 (life on land) is well recognised, e.g. the IUCN Species Survival Commission's Position Statement on the role of botanic gardens, aquariums, and zoos in species conservation[5].
- BIAZA zoos and aquariums are helping to deliver the Global Biodiversity Framework (GBF) targets agreed at CoP15 in 2022[6]. In addition to target 4 which tackles species conservation, zoos and aquariums can play a key role in achieving target 12: to significantly increase the area and quality of, access to, and benefits from green and blue spaces in urban and densely populated areas.
- BIAZA zoos and aquariums are already delivering the targets set out in the UK Government's Environmental Improvement Plan (EIP)[7]. This includes goals 1 (thriving plants and wildlife) and 10 (enhanced beauty, heritage and engagement with the natural environment), and the species and habitat targets, which require a community-focused conservation approach. For example, local and community-level action is required to increase species abundance by 2042 and to improve the Red List Index for England for species extinction by 2042.[8]
- They are also contributing to local recovery, such as assisting in the development and implementation of Local Nature Recovery Strategies, and have the potential to drive national initiatives, such as the UK or Scottish Biodiversity strategies.
- Finally, zoos and aquariums are already playing a major part in meeting the EIP target 'that everyone should live within 15 minutes' walk of a green or blue space', both through their own sites and the influence and practical action that they have on the neighbourhoods around them.

Harvest Mouse
©Woburn Safari Park

White-clawed Crayfish
©Peter Cairns

BIAZA zoos and aquariums in the UK are driving nature recovery initiatives and actively restoring over 100 native species of animals and plants that have become locally or nationally extinct, including beavers, harvest mice, black-tailed godwits, red-billed chough and white-clawed crayfish, whilst helping to conserve thousands of hectares of important habitats. This vital nature recovery work can only take place with the support of local communities, upon whom the long-term success of conservation ultimately depends.

There are many ways in which BIAZA members and communities work together for nature recovery including, but not limited to, direct participation of local people in managing conservation sites; supporting and monitoring species restored through conservation translocation; and connecting wildlife and people across sites to create conservation networks at the landscape scale.

Many BIAZA zoos and aquariums own or manage land for nature recovery, either within or away from their core operational areas. Although these areas are set aside for native species, they often still require active habitat management and monitoring, which provides ample opportunities for community involvement.

Some examples include:

- Local volunteers for the Wildfowl and Wetlands Trust (WWT) help manage important nature reserves at Slimbridge and other wetland centres.
- Marwell Zoo engage local volunteers and corporate volunteers in the management of the SSSI designated sites that they manage.
- West Midlands Safari Park have important heathland sites both inside the zoo perimeter and on adjacent land which they manage together with the Worcestershire Wildlife Trust.
- Plantasia Tropical Zoo in Swansea work with local schools and community groups to develop nature and biodiversity in the land adjacent to their venue through their 'Grow Your Imagination' project.
- Colchester Zoo collaborate with Colchester Borough Council on a nearby brownfield site which is now being converted to public access parkland, conducting habitat quality assessments and monitoring restoration progress at the site.
- Working in partnership with the Ealing Wildlife Group and The Beaver Trust, as well as others, Battersea Park Children's Zoo are working closely with the local community as part of the beaver reintroduction project supported by the Mayor of London. This includes through 'beaver preparation volunteer days.'

Furthermore, some of the sites managed for nature by BIAZA members are also freely accessible providing important open spaces for local communities, for example, the nature reserves at Chester Zoo and Twycross Zoo.

Local communities are vital to restoring locally extinct or depleted native species. Initially, it is vital to seek approval from people living nearby through inclusive and accessible engagement activities. Wildwood Trust recently demonstrated widespread support for their red-billed chough reintroduction project, while WWT engages local schools and community groups as "guardians" to sponsor released black-tailed godwits.

Active community participation may also be required e.g. for the reintroduction of zoo-bred wildcats in Scotland led by the Royal Zoological Society of Scotland (Highland Wildlife Park). Here, local community members report sightings of wildcats as well as feral domestic cats. The latter are then neutered and vaccinated to protect the released wildcats.

Community members can also act as citizen scientists to monitor threatened species. In the River Thames, over 1,000 volunteers have helped the Zoological Society of London (London Zoo) to monitor European eels and, further north, Flamingo Land work closely with the North Yorkshire Crayfish Forum to recruit and train volunteers to monitor the white-clawed crayfish.

POLICY ASK

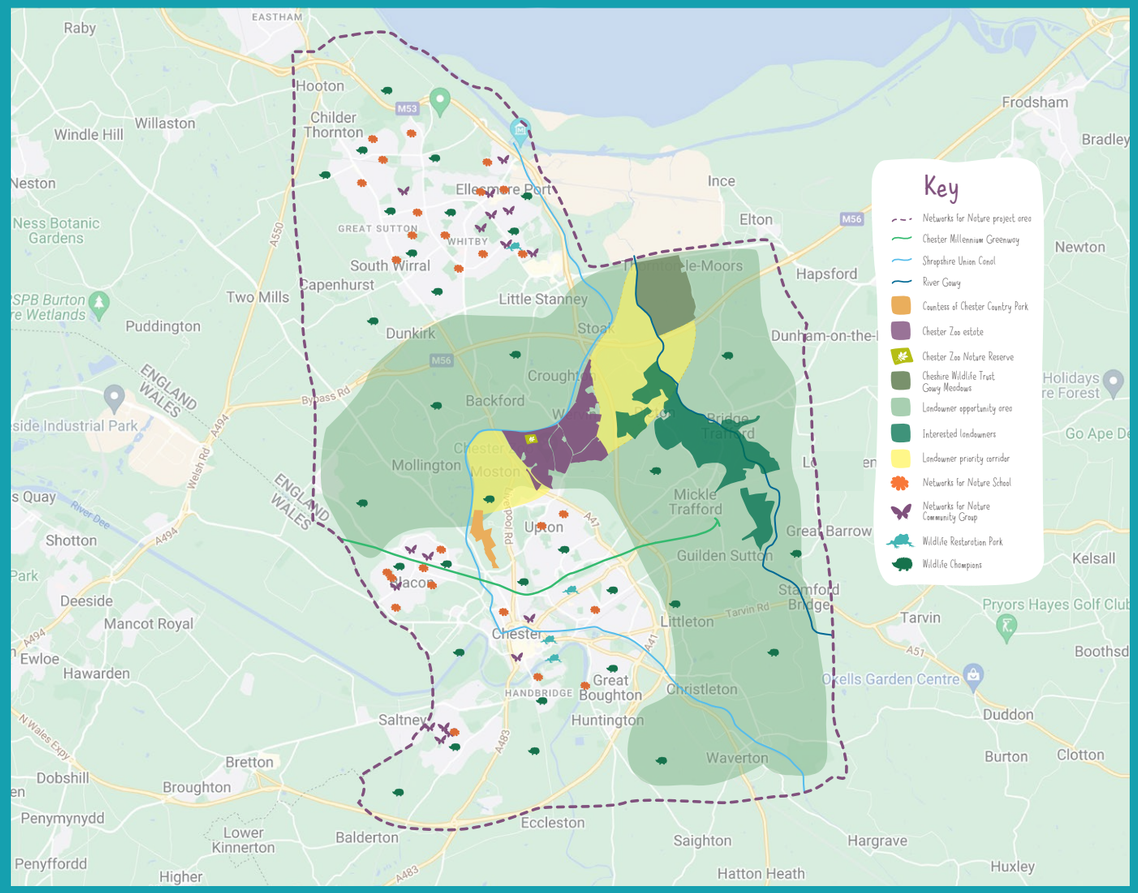
Explore and champion new opportunities for collaborative community-based conservation initiatives between government and zoos and aquariums. This includes acknowledging the integral role of zoos and aquariums in future reviews of national nature recovery plans, such as National Biodiversity Strategies and the Environmental Improvement Plan.

Meanwhile, the Battersea Park Children's Zoo is working with the Ealing Wildlife Group, to train volunteers to monitor the reintroduction of zoo-bred harvest mice across nature reserves in west London, and on the south coast of England the scuba diving community is supporting seagrass recovery through voluntary survey dives with Ocean Conservation Trust (National Marine Aquarium) and Wild Planet Trust (Paignton Zoo).

Working with communities can also help extend conservation impacts beyond individual project sites across wider networks. This landscape approach is key to Local Nature Recovery Strategies and the UK's commitment to protect 30% of the UK's land and sea by 2030. Working with Kent Wildlife Trust and the support of local communities, Wildwood Trust are managing the UK's first free-living bison herd to create a more natural and dynamic ecosystem in West Blean and Thornden Woods Nature Reserve. The bison are part of a large-scale experiment into the ecological impacts of large herbivores in one of the largest areas of ancient woodland in the UK.

Black-tailed Godwit,
Wader Lake
©WWT

European Wildcat
©RZSS



Chester Zoo Nature Reserve
@Chester Zoo

CASE STUDY

Chester Zoo – Nature Recovery Corridor and Networks for Nature

The Chester Zoo Nature Recovery Corridor (NRC) aims to restore a network of wildlife-rich habitat and create a community empowered with the passion, knowledge, and skills to make it an iconic corridor that flourishes long into the future. The NRC is designed to make a significant contribution to the future Local Nature Recovery Strategy for Cheshire and Warrington, focusing on the urgent need for natural connectivity in a semi-urban landscape.

Funding from the Green Recovery Challenge Fund (GRCF) and match funding sources enabled Chester Zoo and partners to deliver the first phase of the ambitious landscape scale vision, focusing on a southern 6.5 miles section between Lache to the south, through Chester City Centre to the Chester Zoo estate, bordered by the Shropshire Union Canal to the north.

The success of the project was possible due to the development of a strong partnership between key organisations working across the landscape, including Cheshire West and Chester Local Authority, The Land Trust, Canal and River Trust, Sustrans, and Cheshire West Communities Together. Over 19 months, the Zoo worked closely with a vast array of local people including community groups, schools, mental health charities, religious groups, refugee groups, allotment keepers, and fellow wildlife charities to help them make their green spaces better for both people and wildlife.

A key objective of the project was to provide accessible and inclusive opportunities that enabled participants to engage in nature recovery and to feel empowered to continue to improve and protect the greenspaces that they improved.

The project delivered improvements over 62 hectares for wildlife including eight ponds, 24 ha wildflower meadows, and 15 ha of grassland and directly engaged over 12,000 people. Many of them were supported to build skills, knowledge, and agency to be empowered to continue conservation efforts independently, to protect and improve spaces for wildlife after the end of the project. Feedback showed significant improvements in participant wellbeing, connection to nature, and gained knowledge.

After being involved in the project, 82% of participants reported improved wellbeing, 78% reported an increased connection to nature, and 84% said that they had gained new knowledge, such as how to identify and document native wildlife and plants, how to encourage wildlife in their own gardens, and how to effectively manage habitats for nature.

Chester Zoo is now leading Phase 2 of the project, called Networks for Nature, and has secured a National Lottery Heritage Fund (NLHF) development grant. In terms of scale, the project area will cover around 60 square miles from the River Dee to the River Mersey, including Chester and Ellesmere Port with combined population of 138,000.

Sustainability and Climate Change

- BIAZA zoos and aquariums' work on sustainability has the potential to contribute across all SDGs. When looking at environmental sustainability, zoos and aquariums have particular opportunities to contribute to goal 7 (affordable and clean energy), goal 11 (sustainable cities and communities), goal 12 (responsible consumption and production) and goal 13 (climate action). This potential can be seen in the sustainability strategies and plans of BIAZA, many of the larger zoos and aquariums, and the World Association of Zoos and Aquariums (WAZA) whose Sustainability Strategy[9] is SDG aligned.
- BIAZA zoos and aquariums are at the heart of sustainability action, including the transition to Net Zero and meeting the Paris Agreement, developing climate resilience and the National Adaptation Programmes, addressing waste pollution and water quality, the associated work to utilise nature-based solutions to address the climate and nature crises together, and empowering everyone to live more sustainably.
- BIAZA zoos and aquariums play a critical role in showing leadership in sustainability, empowering people to live more sustainably, and influencing businesses and governments to adopt and drive forward more sustainable practices.
- All BIAZA members are required as a condition of membership to have a site specific sustainability policy which should be made publicly available.
- As visible leaders within their communities, BIAZA zoos and aquariums can demonstrate the transition to net zero, adapting to climate change, addressing waste, improving energy and water efficiency, adopting sustainable practices to avoid the overconsumption of natural resources and buying products from sustainable sources.

Lagoon View Hide with Roe Deer,
©WWT Washington

Some examples include:

- Noah's Ark Zoo Farm has several initiatives on site including renewable energy (solar PV and biomass boilers), low food miles animal food including browse grown onsite and home-grown food for the catering department;
- Marwell Zoo uses a combination of woodchip biomass and its animal waste to heat its Energy for Life Tropical House and five other buildings via heat network;
- Edinburgh Zoo is investing in a solar meadow capable of generating 25% of the zoo's electricity demand;
- Chester Zoo is switching to air source heat pump technology, installing solar PV across site and has removed single use plastics across its visitor operations; and,
- The National Marine Aquarium is developing a significant decarbonising programme. The phased approach will see installation of partial heat pumps to support chiller efficiency, variable pumping systems and solar PV installation as well as a complete review of the electrical infrastructure, energy use and heat exchangers.

The global reach of zoos and aquariums, coupled with their education and outreach activities provide a valuable opportunity to connect people with nature and sustainability issues. Links with issues such as climate change and the overconsumption of natural resources and the iconic animal and aquatic species in BIAZA zoos and aquariums provide a powerful means of empowering people, government and industry. This can lead to practical solutions and behaviour change to be more sustainable and make a positive benefit to climate and nature.

Through partnerships with communities and businesses, BIAZA zoos and aquariums drive behaviour change campaigns and spearhead community driven campaigns to promote sustainable living practices, such as advocating for sustainable palm oil and fish sourcing.

A key example of this approach, focused on sustainable supply chains, has seen BIAZA zoos and aquariums leading the way in championing procurement of products containing certified sustainable palm oil, through links with orangutans and other rainforest species, and empowering government, industry and the public to adopt similar practices. As part of Chester Zoo's wider international Sustainable Palm Oil campaign, Chester became the first Sustainable Palm Oil City in 2019 – providing support, resources, education and project-based work across industry, hospitality sector, schools, and the wider community to purchase products containing certified sustainable palm oil.

This is a model that has been rolled out to communities across the UK, including the communities around Blackpool Zoo and The Deep in Hull. Chester Zoo also runs a broad programme of education and behaviour change, including outreach projects in schools on climate and sustainability themes and a collaboration with the University of Chester to deliver a PGCert course to equip teachers with knowledge on conservation and sustainability.

The local business community is a vital part of our journey to living sustainably and zoos and aquariums show leadership in this area. For example, over the last 10 years Marwell Zoo have chaired the Winchester Sustainable Business Network and organised over 40 events for businesses across the region on a wide range of topics including climate change, carbon reporting, energy efficiency, recycling, circular economy, social impact, biodiversity, supply chain management and sustainable construction.

Red Squirrel
©Wildwood Trust

This has engaged many hundreds of people from a wide variety of businesses as well as local authority representatives in what it means to operate a sustainable business. More recently many of these events have been presented as webinars increasing their reach beyond the local area to business and individuals nationwide with over 100 people attending online events in 2022 and more than double that viewing the event recordings.

BIAZA zoos and aquariums wield significant influence in shaping policy and industry practices on sustainability. They serve as trusted members of local communities on sustainability, providing input and guidance to plans and strategies with critical local (and often national and international) importance. This includes providing expert advice on local and regional plans, like Local Authority Climate and Nature Emergency Plans, to maximise the use of nature-based solutions and to ensure blue and green space can provide meaningful benefits to nature, hand in hand with the benefits to people.

Some examples include:

- The Ocean Conservation Trust in Plymouth have developed the 'Ocean Recovery Declaration' model to help local governments recognise that the world's ocean is a fundamental part of climate regulation and that it must be considered as part of an effective climate emergency response, with 17 councils currently signed up;
- In Yorkshire, Flamingo Land is an industry partner working with the community and Local Enterprise Partnerships (LEPs) and engaging politicians and local councils to try and make Yorkshire the first carbon neutral region; and,
- Chester Zoo is a member of a number of groups including local authority planning, LEP sustainable and inclusive growth and regional sustainability groups, helping to embed nature, climate and sustainability in plans for the region.

POLICY ASK

Government policy must integrate considerations of nature into all sustainability efforts to address the interconnected climate and nature crises effectively. This includes considering the impact, mitigation, and opportunities to nature and biodiversity in the transition to net zero, maximising the use of nature-based solutions, and empowering people and industry to be more sustainable.

Beaver
©Wildwood Trust

Zoo Poo Briquettes
©Paul Collins

Zoo Poo Delivery,
Marwell Zoo
©Paul Collins

CASE STUDY

Marwell Zoo – Energy from Animal Waste

Marwell Zoo has become the first of its kind to generate renewable energy using animal waste in tandem with woodchip biomass. Zoo poo from endangered species such as Grevy's zebra, scimitar-horned oryx, and African wild ass heat their largest buildings using biomass technology.

The world-first 'Energy for Life' initiative saves 220 tonnes of carbon dioxide equivalent (tCO_2e) each year and was a critical step in the zoo achieving carbon-neutral status in 2022 and 2023.

Dr. Duncan East, Head of Sustainability said: *"Using heat in this way from our own animals is unique in the UK and, as far as we know, across the world. There is an urgent need to reduce the burning of fossil fuels and leave these high carbon sources in the ground. We couldn't act quickly enough to replace the oil-fired heating systems in these buildings.*

"Previously, 600 tonnes of animal waste was taken off-site to be composted. This came with a significant carbon transport cost. We came up with the idea of biomass heat generation to reduce our carbon footprint. We would turn a previous waste stream into a valuable resource – achieving cost savings in the process."

Since the Energy for Life Tropical House opened in 2018, Marwell Zoo have been working with experts to build a solution using a blend of different technologies so their unique animal waste can be processed into briquettes to fuel the new biomass boiler efficiently.

Zoo Poo Truck,
Marwell Zoo
©Paul Collins

Education and Outreach

- BIAZA zoos and aquariums actively contribute to SDG 4 (Quality education), reflected in the WAZA's education strategy[10], and fostering connections to nature for Goal 3 (Good health and wellbeing).
- Additionally, this work also impacts Goal 11 (Sustainable cities), Goal 12 (Responsible production and consumption), Goal 13 (Climate action), Goal 14 (Life under water), and Goal 15 (Life on land).
- At the national level, this work aligns with initiatives such as the Department for Education's Sustainability and Climate Change Strategy and the Scottish Government's Mental Health Strategy, along with the Delivery Plan for Scotland's education system.

BIAZA zoos and aquariums play a crucial role in society by bridging the gap between people and the natural world. They undertake a significant amount of work in formal learning settings throughout the UK, facilitating the delivery of conservation and sustainability in the curriculum through curriculum supporting initiatives and cross curricular subjects.

This goes well beyond a visit, with many zoos and aquariums running extensive schools outreach programmes, taking nature recovery and sustainability campaigns into the classroom and working with teachers to magnify the impact[11].

The educational role played by BIAZA zoos and aquariums also extends beyond formal educational settings with extensive engagement of visitors, supporters, followers on social media and the wider public in conservation and sustainability.

A recent systematic review has provided solid evidence of how this significantly changes knowledge, beliefs, attitudes and ultimately behaviours.[12]

In a rapidly urbanising world, many individuals, especially those not closely connected to nature, find it challenging to experience wildlife beyond the confines of the towns and cities they live in. Recent studies in the UK have highlighted a disturbing disconnect between people and nature, often referred to as 'nature deficit disorder'.[13]

Our zoos and aquariums thus serve their local communities as gateways to the natural world, providing immersive experiences that engage all the senses.

They play a pivotal role in reconnecting individuals with nature around them. Over the past four decades, these spaces have harnessed the empathy cultivated during these encounters to involve visitors in conservation efforts.

Many BIAZA zoos and aquariums actively support their local authorities and schools to embed conservation into their curriculum.

Examples include:

- The Ocean Conservation Trust at the National Marine Aquarium is working with the Connect Multi Academy Trust to deliver the UK's first Ocean Curriculum. This is designed to create and deliver an engaging Ocean Curriculum that will increase Ocean literacy across the city of Plymouth. This is based on decades of work to provide an exciting and engaging learning programme, using the Ocean as a hook for teachers to deliver all subjects of the curriculum. Their programme is co-created with teachers and comprises sessions and workshops that support curriculum-based learning at all key stages and abilities and in 2022 alone it impacted 25,782 pupils.
- Chester Zoo has provided curriculum support for over 100 schools in the north-west and north Wales since 2017 via their Ignite Zoo project, a capacity building model, resulting in whole school community approaches to conservation topics. They also deliver project work in 60 schools each year (engaging 11,000 pupils) with a particular focus on high free school meal schools, including projects focused on biodiversity improvements on school grounds and other conservation themes.

A focus on the more deprived areas of their communities in their educational programmes is a common feature of zoo and aquarium education programmes. For example, the WWT targets children and families in less advantaged areas through Generation Wild, a nature connection project that impacts 15,000 children per year.[14]

Take-over days have proved popular for example at Chester Zoo and The Deep, where the zoo/aquarium's public engagement programme is taken over for the day by school children who learn how to engage the public on issues such as sustainability.

Many of the larger zoos and aquariums have partnerships with local FE colleges and Universities, co-delivering diploma and degree programmes covering aspects of wildlife conservation and environmental science. These include Jersey, Bristol and Chester who all have their own academies that deliver a portfolio of HE programmes and relevant CPD and Colchester Zoo who work closely with Writtle College to deliver animal management programmes.

Educational programmes teach visitors about the biology, behaviour, and conservation needs of both local and global species, enhancing scientific literacy.

They also inspire individuals to pursue careers in biology, ecology, and wildlife conservation and many BIAZA zoos and aquariums run careers events to support young people in the communities around them to consider environmental careers and encourage them to study STEM subjects. For example, Colchester Zoo is a host venue for the Great Science Share – a campaign to increase science in school and encourage 5-14 year olds to investigate and think scientifically. In 2023, 50 children from 6 schools participated from their local area. As millions of people visit BIAZA members every year, these experiences can form part of the continued exposure to knowledge, understanding and emotional connection with the natural world.

POLICY ASK

Give greater support for schools to provide opportunities for nature-based learning within zoo and aquarium settings to effectively meet and support curricular educational targets. These experiences can form part of the continued exposure to knowledge, understanding and emotional connection with the natural world.

UNESCO states that non-formal educational activities play an important part in helping to create public awareness and understanding of sustainability issues and concern for these issues.

Every zoo and aquarium that took part in the recent BIAZA survey on social impact said that they delivered at least one form of informal or free-choice learning programmes. As these programmes are not linked to formal curricula, there can often be greater opportunity to tailor the learning to specific conservation outcomes such as nature positive behaviour change.

Dragonfly,
Paignton Zoo, Wild Planet Trust
©Oliver Newton-Browne

Camera Trap
Loan Scheme
©Colchester Zoo

CASE STUDY

Colchester Zoo – Camera Trap Loan Scheme

The Colchester Zoo Camera Trap Loan Scheme aims to encourage students to investigate and explore wildlife, to develop the skills used in conservation to monitor wildlife and to demonstrate a greater appreciation of local wildlife.

Through this project, schools are able to borrow camera traps to set up on school grounds and are provided with activity packs and an identification guide to support exploration of wildlife and interpretation of the camera footage.

The main activity pack includes activities to explore their footage, create experiments using the camera traps and consider the conservation applications of this technology.

Activities are designed to help students develop conservation skills and to highlight the potential careers available using camera traps, as well as helping students to connect with their local wildlife.

Student written science reports suggest that students are detailing what they had been observing and evidencing critical thinking with regards to this.

Teachers identified the skills they believed students had been able to develop through the camera trap loan scheme and results of these show that the most common skill identified was teamwork, with observation second. Discussion, problem-solving and patience were also mentioned by a number of schools.

This project has successfully connected students with British wildlife and has shown evidence of helping students to feel a greater appreciation of nature. This highlights the potential role of zoos in native species conservation as well as the value of conservation education.

It also provides students with valuable scientific skills, such as observation and problem-solving, which arevaluable in conservation careers and a range of other opportunities. Additionally, this project has helped students to gain more personal skills, such as teamwork and patience. Therefore, it has also had a pastoral impact on the students taking part in the project.

Economic Growth and Regeneration

- Through their importance to the tourism and leisure industry and to their local economies, BIAZA zoos and aquariums have the potential to contribute towards the Government's mission of kickstarting economic growth to secure the highest sustained growth in the G7.
- BIAZA zoos and aquariums can make a significant contribution to development of green skills and jobs, contributing to the ambition for 2 million green jobs by 2030 set out in the Green Jobs Taskforce report.
- Our zoos and aquariums are contributing to SDG 8 (decent work and economic growth).

Zoos and aquariums are valuable components of the UK tourist industry. In 2019, and prior to the pandemic, the total value of BIAZA zoos and aquariums to the UK economy was estimated at £658M, representing 0.03% of GDP for the UK in that year[15]. This considers both direct value (money spent in the zoo and aquarium by visitors etc) and indirect impacts (such as via supply chains, outsourced construction projects, visitor spend in the wider regional economy through overnight stays and restaurant meals). The same BIAZA members employed a total of 11,000 staff and had 4,700 volunteers.

As much of the contribution to GDP takes place at a regional level, zoos and aquariums play an important role in the local economies of their city, borough, county and/or region. Although very few estimates have been attempted at a regional level, one study carried out by BIAZA in 2011 found that zoos and aquariums in Devon and Cornwall, including Paignton, Newquay, and Dartmoor, were estimated to bring an £82M benefit to the South West of England.

Bluebell
@Chester Zoo

To determine contributions to their local economies, several zoos and aquariums have commissioned their own economic studies. In 2019, Chester Zoo commissioned an analysis of the economic and social value of the zoo which revealed a total economic contribution to the north-west region of £83.1M Gross Value Added (GVA), supporting 1,750 FTE jobs (570 in the zoo and the rest in the wider economy). This represents 0.04% of the GDP estimated for the NW region in 2019, which is comparable with the national figure mentioned above. Around the same time, GVA values for ZSL zoos (London and Whipsnade) were estimated via similar studies at £105.8M, whilst in 2017 the annual net worth of The Deep aquarium in Hull to their local economy was calculated as £14.7M. Post pandemic, in 2022 Marwell Zoo in Hampshire reported a GVA of £76.1M, supporting 854 local jobs.

As private businesses or charities running on a social enterprise model, zoos and aquariums play a key part in their local business communities and BIAZA zoo and aquarium leaders and staff are often actively involved in local and regional Chambers of Commerce, Business Associations and Local Enterprise Partnerships.

For example, Twycross Zoo and Marwell Zoo both have positions on the Board of their LEPs, Noah's Ark Zoo Farm plays a leading role in the visitor economy business forum for North Somerset, and Chester Zoo has recently joined the Cheshire Science Corridor.

Orchard planting,
Nature Recovery Project
@Chester Zoo

Other zoos have secured Government funding designed to stimulate economic growth and development, for example Twycross Zoo secured Levelling-up Funding of over £20M to develop a new National Science and Conservation Centre at their site which will provide unique research and training opportunities for the Universities and their students in the region around it as well as international scientists.

Furthermore, economy stimulating initiatives around tourism often include special packages with local hotels and other businesses to encourage visitation and longer stays in the area, thus boosting the wider economy. For example, the Edinburgh city centre Indigo Hotel offers a package which includes complimentary tickets to Edinburgh Zoo with direct transport from the hotel to the site.

Through contributing to green jobs in their regions, BIAZA zoos and aquariums will help deliver national and regional Government targets for green growth. Chester Zoo was successful in securing nearly £1M of Government funding from the Green Recovery Challenge Fund designed to stimulate the creation of green jobs post Covid through their Nature Recovery Project. A number of BIAZA zoos and aquariums are also involved in training schemes for conservation-related roles, including apprenticeships, helping to build pathways into green careers for people from all backgrounds in the communities that they serve.

Zoo and aquarium supply chain relationships in the local economy have significant value and are often mission-focused, providing a positive impact on local and regional conservation and sustainability objectives. For example, Chester Zoo has taken its sustainable palm oil campaign to its local and regional suppliers and the local city of Chester was declared the world's first sustainable palm oil city after the zoo persuaded more than 50 local businesses to audit their supply chains so that products containing palm oil were procured from certified sustainable sources. In partnership with Chester, Blackpool Zoo, Newquay Zoo and The Deep, Hull, are also leading campaigns in their respective regions to support a positive shift in demand from non-sustainable to Certified Sustainable Palm Oil.

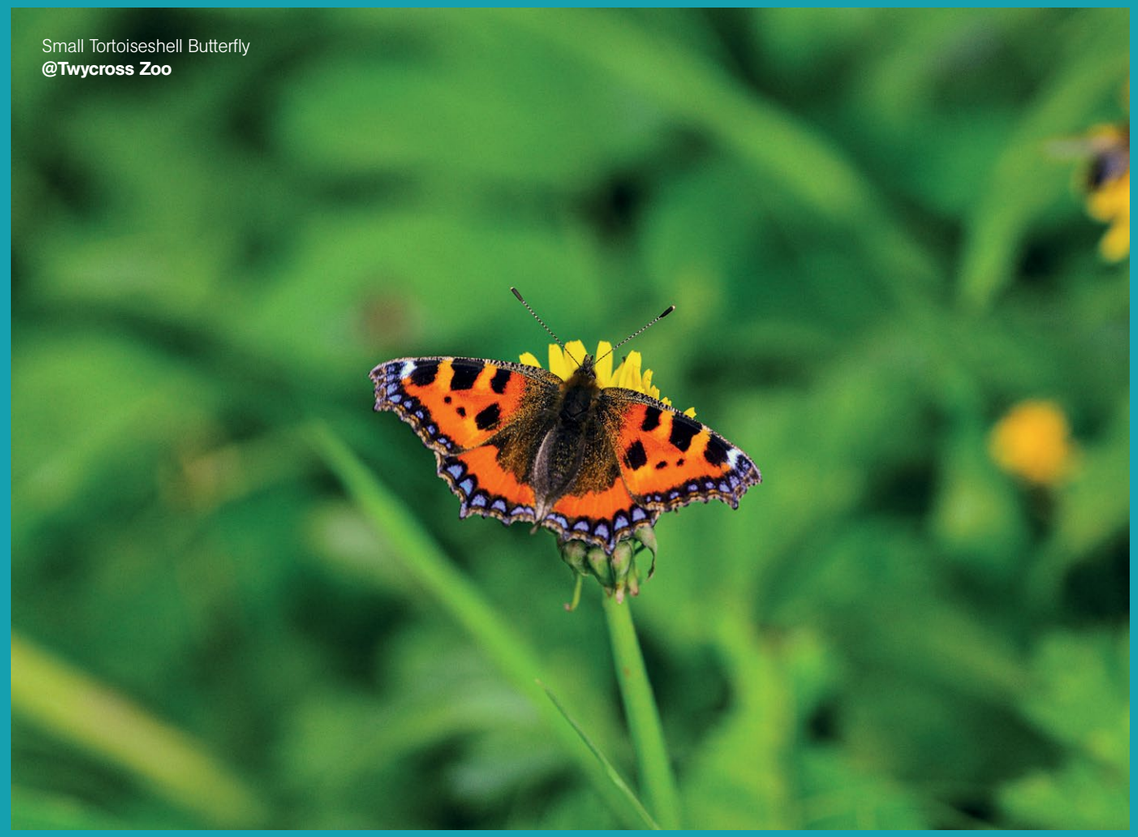
To inspire the highest standards of sustainability within their local and regional communities, many zoos and aquariums commit to using local suppliers (such as Noah's Ark Zoo Farm near Bristol), using a range of ethical products in their shops and restaurants (such as Chester Zoo), and to recycling their food waste as biomass (such as Dartmoor Zoo).

Many BIAZA zoos and aquariums are membership organisations drawn largely from their local communities, where members are entitled to discounts or season tickets. Some of these organisations collaborate with local businesses to provide special offers and discounts for their staff and/or members which help to generate economic activity and growth around the core offer. Many are also attractive venues for conferences, meetings and events which are accessed by community organisations, local businesses, corporates and international organisations which bring further visitors from outside the area and overseas.

POLICY ASK

Further recognition of the economic significance of zoos and aquariums in the context of the communities that they serve at regional and national level, through greater consultation and engagement including in regional business forums.

Adder
©Wildwood Trust



Small Tortoiseshell Butterfly
@Twycross Zoo

National Science and Conservation Centre
@Twycross Zoo

CASE STUDY

Twycross Zoo – National Science and Conservation Centre and Levelling-Up Fund

As a 60-year-old conservation charity zoo, Twycross, is a significant tourism attraction and economic driver within Leicestershire, vital to the local economy, contributing significantly to the £80M (2021) tourist spend in Hinckley and Bosworth. In 2021, an application was made to the UK Government's Levelling Up Fund, to deliver a cutting-edge National Science and Conservation Centre (NSCC) to enable new lines of academic investigation into conservation solutions, to host educational programmes and events for universities and schools, whilst also re-energising the zoo's cultural and community offer through the delivery of a new orangutan habitat attraction alongside conference facilities. The NSCC mini-campus consists of classrooms, researcher space, a 200-seater lecture theatre, biosciences lab, and accommodation for up to 50 visiting researchers.

Alongside the ambitious conservation, research and education-based outcomes of the project such as new degree programmes and high value research into animal conservation and the environment, key outcomes also focus on improvement of economy and tourism within the region. These include enhanced enterprise for existing and new businesses, increased opportunity for commercial events, increased visitors dwell and spend in the local area, improved employment opportunities and prosperity including education and leisure, with an aim to reenergise the cultural offering to ensure the area's major tourism asset recovers from the Covid 19 pandemic.

The plans set out were aligned with local strategies for the Midlands, and strongly supported by the local community and key stakeholders.

A key reason for this support is the substantial community benefits that will arise from the NSCC, including:

- Educational and teaching benefits to local schools;
- Enhanced opportunities for disadvantaged schools, students and visitors
- Presence and collaboration of several nationally important universities within one location, which will bring positive spill-over effects to the local economy;
- Wider tourism benefits to local food, entertainment and accommodation facilities;
- Increased community pride due to the international research activities within the facility.

As a key part of the application, a full assessment of the economic benefits of the NSCC was carried out by AMION, appointed by Twycross Zoo on behalf of Hinckley and Bosworth Borough Council (HBBC). The main outcomes of this report suggested that the project would create 87 gross direct jobs (including 35 net additional jobs for HBBC residents) and £3.8m GVA per annum. Furthermore, reflecting the diverse nature of the project and its expected impacts, a wider range of economic benefits were assessed (based on 2021/2022 prices) concluding that over a 20-year period, total benefits of £56.5M would result from the initial £21M investment in the NSCC. Based on the comprehensive application and potential benefits to conservation and the wider economy, in 2021 the NSCC project was approved by the Government's Levelling Up Fund, and plans are in place to start the build during 2024.

Cultural and Social Anchors

- The social programmes run by BIAZA zoos and aquariums contribute to the more socially orientated SDGs, especially goal 3 (good health and wellbeing), 4 (quality education) and 10 (reduced inequalities).
- The health and wellbeing benefits of visiting zoos and aquariums and of many of their public engagement initiatives described in this section will play an important part in helping the Government to deliver their mental health strategy.

Just as our libraries, museums, community centres and even the local pub are part of our social fabric, so too are zoos and aquariums in many of our towns and cities across Great Britain and Nothern Ireland. Many have been part of the local community for over a century, hosting community events, supporting local charities, and are places where generations of families make memories and build connections with the natural world, and each other.

These long lasting, meaningful connections between visitors and the natural world can lead to positive benefits for visitor's mental and physical health and drive positive behaviour toward nature.

BIAZA zoos and aquariums have made great efforts to integrate with local people and contribute positively towards a wide range of societal issues that affect their visitors and wider communities alike. Often this aspect of their work is embedded into mission statements and conservation strategies.

BIAZA zoos and aquariums are important spaces for informal learning opportunities and many offer space and facilities for local groups such as Rainbows, Cubs, Scouts, NHS groups, U3A, Rotary Clubs and many others.

They also provide important experiential opportunities for community members who may have barriers to accessing nature, giving them a chance to experience activities that they would not get the opportunity to experience otherwise. These experiences are often funded through the social responsibility budget of the collection, through grant funding or corporate support. This ensures that these sessions are delivered to the target audience and any economic barriers to participation are mitigated.

BIAZA zoos and aquarium volunteer programmes are especially valuable in providing social benefits for the communities that they serve, as was revealed in a piece of detailed research conducted with 524 volunteers in 19 BIAZA collections published in 2017.[16]

Community volunteering at Chester Zoo
©Chester Zoo

The results clearly show how zoos and aquariums offer a range of social, intellectual and cultural benefits to their local communities, in addition to delivering against their conservation and education aims. The analysis revealed significant positive self-reported impacts on the volunteers in five key areas, health and wellbeing, personal development, knowledge and skills, connection with people and support and training.

Two important age groups in particular are well represented in zoo and aquariums volunteering, namely young adults and older people who have retired and these communities are very well served by zoo and aquariums volunteering programmes.

Our zoos and aquariums have a special role in communicating science to a wider audience and several are very active in this sphere.

For example, since 2018 Colchester Zoo have delivered lectures at local pubs as part of the science festival run by the non-profit 'Pint of Science' to encourage and engage new audience with science and communicate contemporary scientific developments to the public.

In addition, they deliver public science activities as part of Sci-Fest hosted at a local secondary school where between 2,000-3,000 families attend to learn about science in their community. Outreach outside of the zoo or aquarium boundaries can provide excellent opportunities to give back to local communities, undertaking projects that help them feel neighbourhood ownership over the collection and conservation aims.

Puffins
©J Judge

BIAZA zoos and aquariums play a strong social role in their local communities, assisting with projects designed to help socially less advantaged and vulnerable members of society, as the following examples show.

- At Woburn Safari Park, there is a strong collaboration with Bedford Council which supports holiday activities which importantly include a hot meal for the children taking part.
- This is mirrored in Plymouth at the National Marine Aquarium, who run 'Ocean Squad' for children on the Fit and Fed scheme, meaning that they can enjoy Ocean activities, but also have a healthy meal.
- Dartmoor Zoo's Grow for Good programme, helps socially isolated people to learn new skills in gardening and teamwork.
- Plantasia in Swansea is proud to support a Silver Safari, an event specifically for older members of the community who can meet and enjoy each other's company.
- The Zoological Society of London supports Refugia, a creative and equitable engagement programme for conservation science with refugee and asylum seekers. A co-produced exhibition was hosted to share artwork and reflections.
- Silver Sharks at The Deep provides a place for older people to socialise and learn new skills that link to the Ocean.

A growing field of research shows that exposure to nature – both green and blue spaces, including 'man-made' settings such as zoos and aquariums – can have a wide variety of positive mental and physical wellbeing benefits to visitors. Experiencing nature in this way can also lead to a greater empathy and broader value of the environment.

POLICY ASK

Acknowledgement of the role of zoos and aquariums as cultural spaces that are integral to our social fabric, alongside museums and galleries, and the promotion of the health and mental benefits of visiting these green and blue spaces.

Charitable and profit making BIAZA members alike, leverage their charitable mission to provide a broad range of experiences that are designed to improve the lives of local people. There is much reciprocity between providing experiences that improve mental and physical wellbeing and subsequent support for healthy natural environments.

The value of BIAZA zoos and aquariums in improving mental health is being increasingly recognised and many are now providing specific opportunities to address this in their programmes. For example, the Ocean Conservation Trust in Plymouth has set up a Blue Mind Hub which aims to ensure everyone understands and has access to the health benefits of the Ocean (see case study below).

Twycross Zoo hold uniform groups focused on mindfulness within their on-site nature reserve and have hosted choirs and orchestras on the zoo site, as part of work to increase wellbeing. Colchester Zoo is one of several zoos who host fun runs through their site, partnering with RunThrough for the annual 10km 'Colchester Zoo Stampede' for around 1,500 runners. The race supports the mental health charity, Mind, as well vas the zoo's charity Action for the Wild.

I spy (education),
Shepreth Wildlife Park
©ZSL London Zoo

Visitors at
National Marine Aquarium
©Ocean Conservation Trust

Snorkel
©Ocean Conservation Trust

Care home visitors
©Ocean Conservation Trust

CASE STUDY

The Ocean Conservation Trust – The Blue Mind Hub

The Ocean Conservation Trust (OCT) is the charity that operates the National Marine Aquarium (NMA), in Plymouth. In 2016 the OCT published ground-breaking research that showed the restorative effects of observing or being on, in, under or next to 'blue spaces'.

To operationalise this research, the next step was to create a 'Blue Mind Hub'. The Blue Mind Hub aims to ensure everyone understands and has access to the health benefits of the Ocean. As part of the Hub, the NMA runs wellbeing activities such as Yoga at the Aquarium, community snorkelling, VR visits to care homes, hospitals, and day centres.

In Summer 2023, the OCT ran a pilot blue social prescribing project. This 7-week programme was designed to give 10 participants the opportunity to gain confidence in snorkelling in the sea, whilst connecting with nature to increase their mental wellbeing. Sessions included beginner snorkelling in Plymouth Lido, rock pooling and snorkelling in the sea. The OCT worked with both the Wolseley Trust and Improving Lives Plymouth to prescribe participants onto the programme, to ensure it was offered to those who needed it most.

During the 7 weeks, participants agreed to complete evaluation forms, designed around the Warwick-Edinburgh Mental Wellbeing Scales (WEMWS). The scale has been widely used nationally and internationally for monitoring and evaluating projects that want to have an impact on mental wellbeing.

An average was taken across the group for both pre and post programme evaluation. On average there was an increase in WEMWS by 7 points, allowing the OCT to conclude that overall, the programme had a significant impact on the participants' mental wellbeing.

One participant started on the low score of 34, putting them in a high-risk category for mental illness, and ended the programme on a score of 47, taking them above the threshold for 'high-risk'.

Further questions revealed that all participants had a prior interest in the Ocean, were looking forward to meeting new people and think that interacting with the Ocean is important for their wellbeing. All scores increased after the programme the most significant change being from 'I am looking forward to meeting new people' to 'I enjoyed meeting new people'.

The OCT intends to further fund this initiative, building links with Link Workers to provide experiences for those with SEN and additional mobility requirements. This work will go some way to support the current mental health crisis that the NHS is experiencing, as well as promoting the value of a healthy and protected Ocean for humankind.

Accessibility and Inclusion + Equitable Access

The National Disability Strategy set out actions to improve the everyday lives of disabled people and included a call to action across society to drive long term transformative change in accessibility and inclusion. BIAZA zoos and aquariums are already leading on this call to action, making their sites more accessible for visitors of all abilities and committing to continuing this journey. They can make a significant contribution to improving the lives of disabled people and sharing this knowledge both within the sector and wider society.

BIAZA zoos and aquariums play a unique societal role through offering the chance for the general public to see wildlife without the cost and significant accessibility barriers that can be associated with travelling. This alone means they create a bridge of access to the natural world that would otherwise rule out large sections of society, ensuring that wildlife is for everyone. Most people will never go to the jungle, swim under the waves with sharks, crouch in a cave as bats swoop by, or stand on the savannah watching the gazelles and zebra grazing together. But zoos and aquariums allow us to do this.

Our zoos and aquariums are going further to provide equitable access for all to nature, with 72% of BIAZA members surveyed stating they are working with local and regional community groups to make their sites more accessible and inclusive in a variety of ways.

Eurasian Otter
©Wildwood Trust

Many BIAZA zoos and aquariums are working to combat the barriers their entry ticket prices can put up – for example, West Midlands Safari Park offer variety club tickets on 3 weekends in September to less advantaged families, and Dudley Zoo and Castle launched an Education Access Scheme this academic year (2023-24), providing heavily discounted access to the zoo for target schools. WWT also developed their 'Generation Wild' scheme – a nature connectiveness project aimed at children and families in less advantaged areas.

Zoos and aquariums work hard to break the link between background and success. It will take all of us, regardless of who we are and where we come from, to reverse the climate and biodiversity crises. Due to their accessible nature and their skilled engagement teams, zoos and aquariums attract and provide opportunities for all cultures, faiths, demographics, and generations. Vitally, not only are these teams compassionate towards nature and the animals that are represented in their institutions, but they are also adept at dealing with a broad range of mental and physical health issues. In many cases, BIAZA zoo and aquarium engagement teams are skilled in more than science communication; they are policy experts, disability aware, and trained in Equality, Diversity and Inclusion, including mental health, autism, and dementia awareness, as well as BSL and Makaton sign language.

BIAZA zoos and aquariums are also implementing adjustments for individuals and groups with neurodiversity and disabilities. For example, Plantasia in Swansea offer subsidised access at set 'quiet times', working closely with the Swansea branch of the National Autistic Society to develop the venue, and training of staff, to ensure the visits are appropriately tailored to their needs.

This concept of zoo and aquarium 'quiet hours' is being seen increasingly across the sector and is welcomed by many as a method to make what can be busy, overwhelming visitor attractions more accessible. Woburn Safari Park also work with the Special Needs Action Panel Parent and Carer Forum to support young carers and children with special educational needs and disabilities.

Even outside of the quieter time slots, many zoos and aquariums are continually striving to make their environments more accessible – Twycross Zoo, for example, provide sensory bags and have opened a sensory walk in the zoo site, and Blackpool Zoo now offer 'quiet opening hours', sensory signage and is reviewing the language used across their public talks programme to ensure it is accessible and inclusive. Belfast Zoo has an Accessibility Improvement Plan that helps the zoo to plan, prioritise and budget for a range of improvements to the experience of visitors with accessibility requirements including quiet hours, sensory days, SignVideo software and a wheelchair accessible vehicle.

Interpretation and signage are also a key area that our zoos and aquariums focus on in terms of accessibility and inclusivity. Interpretation that works for a range of audiences, is essential for zoos and aquariums to get across their key conservation education-based messaging about protecting wildlife. Understanding the needs of their visitors when it comes to signage is key – for example, Northumberland Zoo work with local special educational needs providers to help them deliver training to staff and have volunteers from special education needs colleges on their team, helping them to create accessible and inclusive signage and forms.

Hanwell Zoo have also incorporated opportunities for hands-on creation and input into their signage, as they have an art studio on site for adults with special educational needs that produce interpretation and installations for the zoo.

The accessibility and inclusion journey of the zoo and aquarium sector is also gaining recognition from wider industries. Noah's Ark Zoo Farm, for example, have have developed the Ark for All programme on site, focused on making Noah's Ark accessible to all by their partnerships with organisations such as Bristol's Mobility Centre, which enables visitors to hire wheelchairs for free, as well as working with National Autistic Society Out of School Clubs in Bristol to develop accessible signage. This work has led to Noah's Ark recently winning the Gold Award for Accessible and Inclusive Tourism at the Visit England Awards for Excellence.

POLICY ASK

Engage zoos and aquariums to assist Defra with their aim to improve access to nature for those with visible and hidden disabilities and to reduce health inequalities. Include zoos and aquariums as stakeholders in DCMS to promote the importance of accessible tourism.

Practicing stairs on the blindfolded walk
©The Deep

Blindfolded walk continues through the tunnel
©The Deep

CASE STUDY

The Deep – Sighted Guides

Zoos and aquariums are often thought of as a very visual experience where visitors get the opportunity to see animals not found locally and spend time observing their behaviour. However, zoos and aquariums are developing opportunities to enable everyone to experience the wonders of nature, including those with sight loss.

Many, such as The Deep in Hull, have worked with Guide Dogs UK to train staff to become 'Sighted Guides' who can help individuals with sight loss have a memorable and inspiring experience at their sites.

The Sighted Guide provides the tools needed to help guide a person who is blind or partially sighted in all situations, not just at the zoo or aquarium, but also when out in society. The Guides at The Deep were trying to facilitate an experience, however, this can mean encroaching on the guest's personal space and taking away their freedom to react in whichever way they wish to during engagements, such as artefact handling.

Therefore, the tools were specifically designed to allow the Guide to provide independence to the person they are supporting. This individual is being empowered to get involved with experiences that may have been inaccessible or uncomfortable for them without the assistance of a 'Sighted Guide.'

The training covers the challenges that are experienced by many with sight loss, such as social isolation or financial concerns stemming from unemployment, in order to help the guides identify and provide for the needs of these individuals with confidence.

It also provides the practical techniques, such as the 'Guiding Arm', which enables the guide to provide support and guidance with minimal effort and minimal intrusion so as not to unduly impose on the experience of the person being guided.

The Guides at The Deep can now provide the opportunity for someone who is blind or partially sighted to further engage with their exhibits and help provide a memorable and supportive experience. This enables them to welcome and engage with a community that may have felt excluded from their site in the past.

Conclusions

As we have shown in this report, BIAZA zoos and aquariums stand at the centre of their local communities and contribute in a wide variety of ways. As charities, social enterprises or socially responsible businesses with strong missions around conservation, education and social inclusion, together with a wide reach across communities through their visitation and membership, our zoos and aquariums are in a unique position to deliver positive change. Zoos and aquariums are also important cultural centres within their communities, many of which have long histories and strong links with local and regional traditions.

Despite this, zoos and aquariums do not have access to Government support for cultural organisations and must rely on their own resources to maintain their pivotal roles. The precariousness of this was exposed during the Covid 19 pandemic when zoos and aquariums were forced to close, and their primary source of income was cut off during lock down. Despite a zoo support fund of £100M being made available, the criteria for accessing the money meant that less than 15% was used and many zoos and aquariums struggled to survive. Most are still recovering from this shock, lessening their ability to fulfil their missions. It is time for this to change and for wider opportunities to be opened up to enable zoos and aquariums to achieve their full potential.

Collaborative working is central to zoos and aquariums who co-operate across their sector to manage breeding populations of species held in multiple institutions. This collaborative culture readily extends to other activities and in the examples and case studies above we have demonstrated how zoos and aquariums are working with their community partners to deliver a variety of environmental, economic and social benefits that meet regional and national targets for, amongst other things, native species recovery, greenhouse gas emission reduction, regional economic growth, educational attainment, social inclusion, improvements to mental and physical health and more.

The volume of engagement in these community initiatives is significant, with some zoo or aquarium-led partnerships reaching many tens of thousands of participants in ways that other conservation NGOs would struggle with alone, a direct result of their popularity in their local communities and their people-friendly venues. Where zoos and aquariums have been able to tap into Government funding designed to stimulate green growth, such as the Green Recovery Challenge Fund (Chester Zoo nature recovery corridor) and levelling up funding (Twycross Zoo Conservation Science Centre) the return on investment is considerable.

We therefore encourage parliamentarians and decision-makers to take a wider view of zoos and aquariums and their role in their communities, and consider the steps set out to unlock their potential to support local, regional, and national Government and business in meeting their aspirations towards green recovery and growth.

Common Buzzard,
West Midlands Safari Park
©Matthew Lissimore

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