







BLACKPOOL ZOO
RESEARCH PROSPECTUS
2024



### **MISSION STATEMENT**

"To provide a stimulating, informative, and enjoyable experience, showing visitors our role in the conservation of endangered species through continually developing the highest standard of animal care"

### **RESEARCH STATEMENT**

"We aim to strive for excellence in research, inspire the next generation of zoo scientists and contribute to the wider scientific community through collection of robust empirical data. Research diversity aims to ensure investigations are carried out at all levels encompassing a range of topics across every element of the zoological collection to develop the highest level of animal care and visitor experience."

### **HISTORY**

Blackpool Zoo is located on the site of the original Municipal airport, which opened in 1931 and later operated as an RAF parachute training centre throughout the war. In 1945, Blackpool Borough Council used the now-empty buildings to store the town's illuminations and deckchairs. Then, in 1953, the Royal Lancashire Show took over and ran an annual show until, in 1962. Seven years later, the Blackpool Tower Zoo closed, and the Council drew plans for a new zoo.

In 1972, the 33-acre Blackpool Zoo was opened by TV's Johnny Morris, of Animal Magic, who rode in on an elephant. It was one of two Asian elephants at the family attraction, accompanied by three white rhinos, two giraffes, sea lions, gorillas, chimpanzees, orangutans, lions, and a pair of giant tortoises.

In 2022 the zoo celebrated 50 years of being open, in this time much has changed, in 2007 the zoo transitioned to ownership by Parques Reunidos, and with that led to large investment into the zoological park including the new active oceans arena opened in 2009, orangutan outlook in 2014, Project Elephant Base camp in 2018



### **ABOUT US**

Blackpool Zoo is owned by Parques Reunidos, one of the leading global operators of regional leisure parks, which is the second largest leisure park and the largest operator of animal parks in Europe (ParquesReunidos, 2023).

The zoo is home to over 1,500 animals and 400 species; our collection is varied with a range of exotic species some which are classified as 'Critically Endangered'. We aim to strive for the highest standards of animal welfare and use research and science to innovate our husbandry practices, animal housing, social groupings, and enrichment program.

Blackpool Zoo is accredited by BIAZA and EAZA, meaning our standards of animal care, education, research, and conservation are backed through experts in the zoological industry. We aim to exceed these standards through developing scientific understanding not only of the lives of the animals but also the visitors who visit Blackpool Zoo every day.













### **AREAS OF RESEARCH**

We accept research from all levels of academic study from FdSc to PHD as well as scientific professionals. Research within a zoological collection covers a broad range of subjects, here at Blackpool Zoo we aim to explore research in as many ways as possible including;

- Education and Interpretation
- ❖ Animal Behaviour
- ❖ Nutrition
- Social sciences
- Captive breeding programs
- Genetics
- Veterinary Science
- Animal Records
- **❖** Tourism

Foundation students should be aware that research projects at this level for our animal department can **be observational only** and students will not be permitted to make environmental changes to the animal's husbandry.

If you would like to see a copy of our priority research list, compiled by our animal care and education team, please email <a href="mailto:research@blackpoolzoo.org.uk">research@blackpoolzoo.org.uk</a>

### ETHICAL REVIEW

Before any data collection can commence, research projects must have ethical approval. All projects will be subject to the Blackpool Zoo's ethical review and students will require ethical approval from their educational institution which should be submitted prior to any data collection.

For ethical guidelines for animals please refer to the Association for the Study of Animal Behaviour (ASAB) which are available online at: https://www.asab.org/

For human subjects of research please refer to the ethical guidelines published by the British Psychological Society (BPS) available online at: <a href="https://www.bps.org.uk/guidelines-and-policies">https://www.bps.org.uk/guidelines-and-policies</a>.

For more information regarding ethical review please refer to the BIAZA Research guidelines available at: https://biaza.org.uk/research-resources

Please note research must be beneficial to the animal, species, habitat or zoological collection. Blackpool Zoo will not accept applications that compromise welfare, are not feasible for the zoo, are not scientifically valid or require a Home Office License.





Project Elephant base camp is the largest investment in the zoo's history, this holistic approach to animal care encompasses all aspects of elephant husbandry to facilitate the physiological, social, and psychological needs of our herd. Base camp is specifically designed to facilitate research of our Asian elephants with a high-level research gantry and observation deck allowing 360-degree visual access to our exhibit and CCTV that covers all areas of base camp. Some of our areas of research include:

- ❖ Bull socialization and behaviour overnight
- How does choice and challenge impact herd behaviour
- Enclosure usage and locomotion tracking

At Blackpool Zoo we have a dedicated Elephant Research team, made up of volunteers who collect observational behavioural data for our elephant herd. If you are a student looking to expand your observational skills and have a passion for elephants please contact the research department (research@blackpoolzoo.org.uk) to learn more about the opportunities available

In early 2023, we opened our Big Cat Habitat which now houses two amur tigers and three African lions. Our new facilitate includes CCTV footage for research monitoring, off-show dens and multiple viewing points across the exhibit ensuring our animals can be observed in a variety of different ways. The future hopes to boast a conservation breeding programme for our African lions with exciting opportunities for research.

The feline management concept helps us to engage through education, conservation and research all parts of big cat care in a high standard facility. Some of our research opportunities include:



❖ Social network analysis

Enclosure and resource usage

Effect of enrichment and feeding management on behaviour









Our active oceans arena consists of a group of California sea lions and just next door the only flock of Magellanic penguins in the UK. Our active oceans arena hosts daily educational demonstrations with our sea lions and supports the CBD Habitat Foundation charity which helps one of the most endangered marine mammal in the world, the Mediterranean Monk Seal.

Our research interests for the active oceans arena include:

- ❖ Enclosure usage for the flock of Magellanic penguins in their new exhibit
- ❖ The impact of visitors on the behaviour of California sea lions

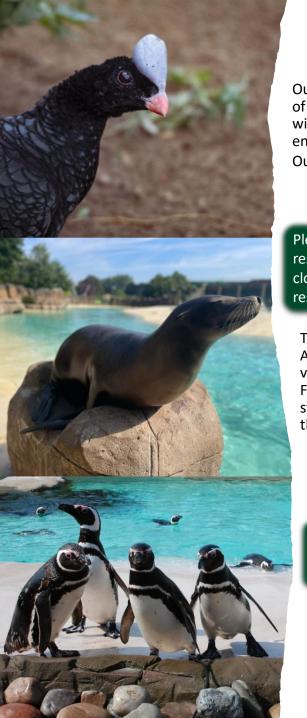
Please note due to current restrictions with highly pathogenic avian influenza (HPAI) some restrictions may be in place with research projects involving our birds including the current closure of our walkthrough exhibit rainbow landings and world of wings, please contact our research department for more information and updates (research@blackpoolzoo.org.uk)

The birds and events section cares for over 60 species of birds including the critically endangered Asian songbirds, the Bali myna and Blue-crowned laughing thrush. Our bird collection includes a variety of aviary types including walk-through exhibits and mixed species enclosures. Luke Forster, the section deputy is a leading expert in this field and works closely with research students. Our bird collection offers the opportunity to complete various research currently on the **BIAZA priority research list** including:

- ❖ Effect of exhibit design on activity and enclosure usage in various species of duck and goose
- Activity budget in captivity compared to pre-existing wild populations for Eastern white pelicans.

Our current research at Blackpool Zoo is exploring the diurnal and nocturnal behaviour of our flock of Caribbean flamingos, in the hope to gain further understanding into their activity budget for husbandry practices.

Blackpool Zoo currently has various off-show reptiles and amphibians including the Endangered African spurred tortoise and the first known Jamaican boa in zoos that was bred via parthenogenesis (asexual reproduction). Our collection also includes groups of invertebrates such as Madagascan Hissing Cockroaches. The research department hopes to expand the research into these lesser studied species to gain insight into husbandry practices, and management within captivity through studies such as exploring the preferences of UV lighting and activity levels.



Blackpool Zoo's mammal department includes a diverse range of primates, small mammals and hoof stock. We currently house 19 species of primate including a breeding group of Pileated gibbons, a mixed species lemur walkthrough and we're the only zoo in the North of England that house Western Lowland Gorilla.

We have multiple groups of red titi monkey which our director is currently the European Studbook holder for, creating lots of opportunity for large scale population wide research.

We also support a conservation charity for the rarest primate in Peru, the San Martin titi monkey. At Blackpool Zoo, we hope to explore our conservation impact on species such as this through visitor engagement and education.

Blackpool Zoo would like to explore research for the mammal's department in areas such as:

- ❖ The response of using herbs for enrichment to prioritise the use of plants for animal welfare objectives \*BIAZA priority research\*
- \* Behaviour and interspecies interactions in various mixed-species enclosures
- Visitor impact and auditory impacts on various species on primate such as De Brazza's Monkey
- Social network analysis
- Visitor impact on behaviour

In 2023, we welcomed the first orangutan baby born at Blackpool Zoo in two decades. Jarang, a male, was born in June **ORANGUTAN** to first time mum Jingaa. We have an ongoing interest into the maternal behaviours exhibited as well as the behaviour and maturity rate of young Jarang over the coming months and to first time mum Jingaa. We have an ongoing interest into the maturity rate of young Jarang over the coming months and years!



Our mammal department also includes aardvark and giant anteater the latter of which have successfully bred and parent-reared a baby in 2020 who moved to another zoo in France, and we have welcomed another offspring this year.

Additionally, the mammal department consists of various hoof stock such as a herd of sitatunga, Hartmann's zebra, giraffe and a breeding herd of reindeer. The research department would like to establish social network analysis in various herds across the zoo as well as in mixed-species exhibits.





Over 35 millions visitors visit BIAZA zoos across the UK each year (BIAZA, 2023), and in 2022 500,000 visitors stepped through Blackpool Zoos gates.

We consider Blackpool Zoo to be a 'Zoo for All' and we welcome every demographic of visitor through our doors in the hope to promote behaviour change and greater awareness. Social research is a growing part of zoo science, understanding our visitors helps us to guide the direction of the zoos future and the way we care, teach and inspire animal care both within the zoo and for the outside world.

Blackpool Zoo is currently exploring the impact of human-animal interactions on visitors connection to nature as well as how learning programmes can impact wellbeing and behaviour changes.

Furthermore, visitors can have a significant impact on the animals that live at the zoo through human-animal interactions (HAI) this can be through visiting an enclosure, an animal interaction or in a walk-through exhibit. This research can be explored in various ways including:

- Visitor questionnaires and surveys
- Dwell time at exhibits
- ❖ Behaviour changes during an HAI, for both the visitor and the animals

Our current social research goals with our visitors includes monitoring visitor movement throughout the park and engagement levels after visiting one of our most popular areas of the zoo, Project Elephant Base Camp.

### **OUR VISITORS**

The research department hope to increase our awareness of visitors of various demographics as well as drive for more social research projects to be explored through topics such as:

- ❖ The impact of conservation in our talks programme compared to 1-1 visitor engagement on visitors understanding
- The impact of animal experiences on visitor's connection to nature and mental health
- Visitor engagement levels during varying talks and workshops



# OUR EDUCATION

#### **EDUCATION**

Of the half a million visitors each year, we welcome over 30,000 students to our zoo with the support of the education department. We offer curriculum-based lessons both inside and outside of the classroom from Early Years all the way through to higher education supporting each student with learning about the animals, their habitat, adaptations and much more.

Our research within the education department looks at the impact of these lessons on information retention and experience, we also examine the impact of learning programs as well as the interpretation we use around the zoo for informal education. With exciting new developments such as the big cat house there will be scope for research projects examining the impact of new interpretation and public engagement within the new exhibit.

#### **SUSTAINABILITY**

We work hard at Blackpool Zoo to promote being green, sustainability is one of our five organisational values, and we strive for new initiatives to drive sustainable practices forward throughout the zoo. The research department would like to gain understanding into awareness of sustainability at Blackpool Zoo through collaborative research projects with our visitors and members of the public in the local area.

### **CONSERVATION**

#### **NATIVE SPECIES**

Blackpool Zoo's location is surrounded by parks and green space, making the zoo an ideal habitat for some of the UK's native species, in recent years the zoo has taken part in BIAZA's Spotted on Site campaign encouraging staff and visitors to log native species sightings on the iNaturalist app.

This year we have collaborated with our local SSI Nature Reserve Marton Mere and we hope to expand our research to their sites, completing flora and fauna surveying to better understand our local habitat.

Furthermore, we would like to discover our own site and welcome any students interested in ecology or native species wildlife to apply.

#### CONSERVATION EDUCATION IMPACT

Blackpool Zoo contributes to conservation of endangered species in many ways

- Conservation breeding programmes
- Caring for vulnerable species
- Delivering conservation education
- Supporting conservation charities in-situ
- Working towards sustainable goals

The research department would like to explore the impact of these actions, both on staff, visitors and the wider public. We use many platforms to spread the message of conservation education and by exploring and evaluating their impact we can look to ensure our goals reach their targets in the most effective way.









#### **ANIMAL RECORDS**

In the UK, as per the Secretary State Standards for Modern Zoo Practice (SSSMZP) the zoo is required to keep accurate records of all individually recognizable groups and individuals (DEFRA, 2012), therefore the zoo uses the globally recognized ZIMS (Zoological Information Management System) to record and store information regarding the animals within the collection, this allows a research opportunity for individuals looking for projects regarding various health, husbandry and welfare factors that can be compared to institutions across the globe.

#### **TOURISM AND MARKETING**

Our zoo is located in the popular seaside resort of Blackpool, we have won several awards over the years including Tripadvisor Travellers' Choice 2022. Our marketing is driven to be educational as well as exciting using social media and our website to increase the awareness of zoo events and offers. The research department would like to support projects that explore the effectiveness and scope of the current zoos marketing as well as the role zoos have within the tourism industry.

**OUR ZOO** 

### RECENT RESEARCH ACHIEVEMENTS

Our education officer Kristian won the Royal Society of Biology best project award for his dissertation

"A comparative study on the behavioural effects of a mixed species enclosure on capybaras (*Hydrochoerus hydrochaeris*)"

Our elephant research volunteer Andrew, presented his research at BIAZA Annual Research Conference

"Through the Elephant's eye: the development and preliminary validation of a visual ethogram for captive Asian elephants (*Elephas maximus*)"

One of our previous research students has been published in JZAR (Journal of Zoo and Aquarium Research), congratulations Rebecca

"Hierarchical position of individual captive Western lowland gorilla (*Gorilla gorilla*) and its impact on neighbour associations and behaviour



### RESEARCH FELLOWSHIP AND FEES

To complete any research project at Blackpool Zoo researchers are required to pay a £20 admin fee which allows access to the zoo for the duration of your data collection period and support from the research department.

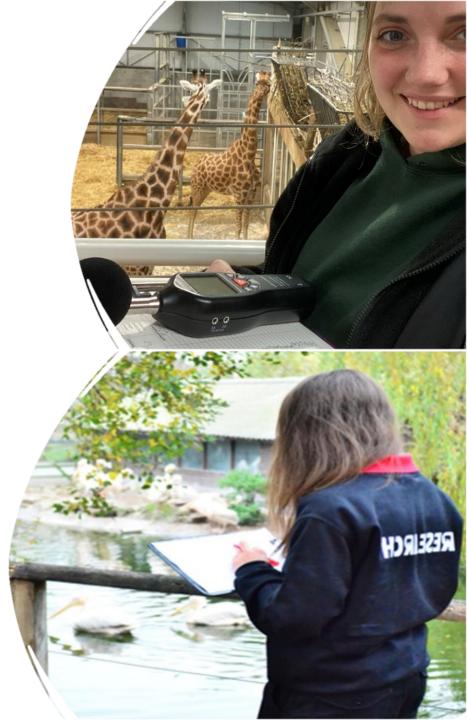
A £10 deposit is also required which will be returned once the researcher has returned the vest, raw data and the final project has been submitted to the zoo, failure to do so will forfeit the deposit.

#### **BLACKPOOL ZOO'S RESEARCH FELLOWSHIP**

At Blackpool Zoo, we believe staying connected to your work even after it is complete is key for the future of networking and research. **BRAND NEW** for 2023 we are introducing our research fellowship, for a £50 fee students will have the benefits of

- ❖ 12-month unlimited access to the zoo
- ❖ 1-1 support sessions from the research department and access to the zoo's research resources
- Entered into Blackpool Zoo's Annual Research Awards
- \* Regular research newsletters and updates from the zoo
- Opportunities for presentations and to appear on our website and social media showcasing your research
- ❖ Access to exclusive talks and presentations at Blackpool Zoo

For more information regarding our research fellowship please contact the research department (<a href="mailto:research@blackpoolzoo.org.uk">research@blackpoolzoo.org.uk</a>)

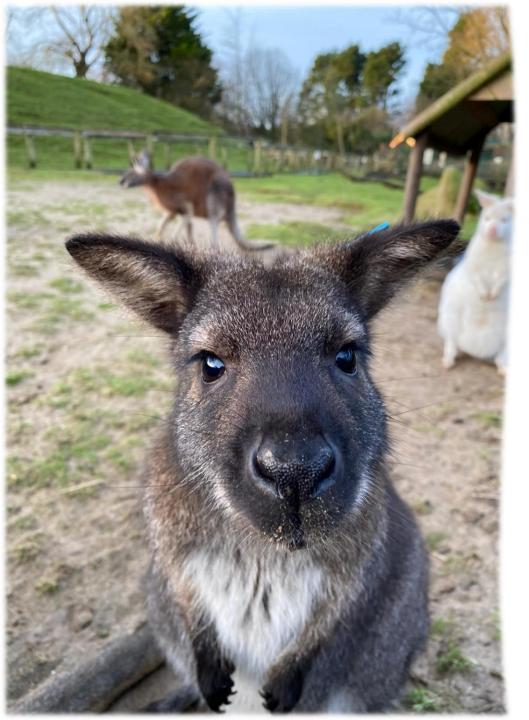


### **RESEARCH POLICY & GUIDELINES**

Please read carefully our Research Policy and Guidelines prior to completing an application form, please note you will be required to agree to and sign these before collection of any data at Blackpool Zoo.

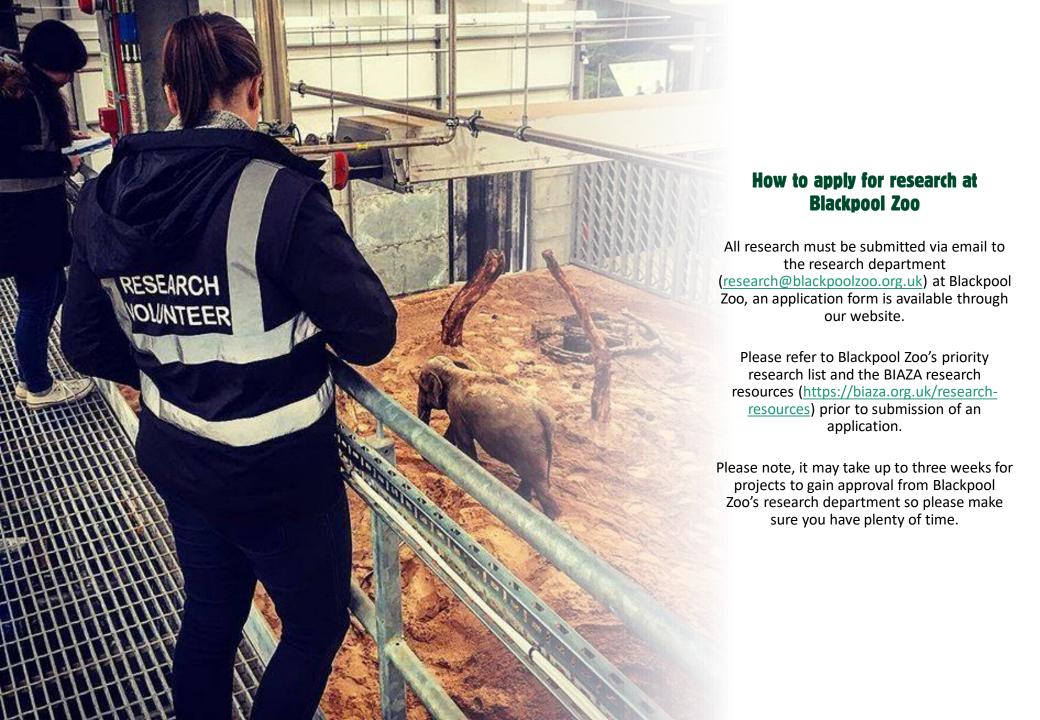
- All research undertaken must be for the net benefit of the individual animals, species and/or their habitat, or for the benefit of Blackpool Zoo. Blackpool Zoo only supports studies that do not compromise animal welfare or adversely affect animal management, are approved by ethical review and do not require a Home Office licence.
- All research to be undertaken in association with Blackpool Zoo must be assessed and approved prior to commencement to ensure scientific and ethical validity, that animal welfare is not compromised and that the research complies with relevant UK and EU legal requirements.
- You must demonstrate that you have clear research outcomes within your application.
- Any changes to the research project must be discussed and agreed to by Blackpool Zoo prior to the changes being made.
- All approved proposals allow the student access to the zoo, the research library and time with zoo staff.
- ❖ A payment of £20.00 is required to carry out research at Blackpool Zoo which will entitle students to zoo access for the duration of their data collection period and support from the research department.
- ❖ An alternative payment of £50.00 will enrol students to the research fellowship where they have unlimited 12-month access to the zoo amongst other benefits.
- Additionally, you will be required to bring £10 deposit. The deposit will be refunded upon return of the <u>research vest, raw data and completed project. Failure to return</u> any of these will lead to forfeit of your deposit
- ❖ Your research vest must be worn at all times whilst collecting data and you must have your research pass for access to the zoo.
- Students can choose to opt out of the research fellowship at any time although full refunds cannot be given.
- ❖ Blackpool Zoo reserves the right to withdraw any Research pass/Student Fellowship without refund in cases where the zoo is dissatisfied with the students conduct, for health and safety reasons or if the policy and guidelines are not adhered to.
- ❖ For health and safety reasons you are required to **sign in and out** of the student log located in the Education building, both on arrival and upon leaving the zoo. Failure to do so will result in your research pass being revoked
- ❖ Any equipment to be used or questionnaires must be seen and agreed by the zoo in advance. Blackpool Zoo hold no responsibility for lost, stolen or damaged items of research. Research resources and equipment must be provided by the researcher.
- All multi-zoo research, including questionnaires, must have the supporting BIAZA and/or TAG support. Support must be demonstrated alongside the application via a copy of the support letter.





## RESEARCH POLICY & GUIDELINES Continued

- All research carried out must be reported in full, with a copy of that report being presented to the zoo at the appropriate time within the duration of the research or course.
- The zoo must be advised and agree in advance any publication plans for research.
- Blackpool Zoo have the right to guarantee anonymity in any papers or presentations if requested
- Any PR activities or communication with the media must be managed in consultation with Blackpool Zoo. Any behind the scenes photos or images must have the zoo's consent before being published.
- All reports and publications resulting from research at or through Blackpool Zoo (including samples) should acknowledge fully Blackpool Zoo, unless anonymity is requested, with copies forwarded to Blackpool Zoo.
- It is expected that individual zoo staff contributing to, or supervising research projects must be acknowledged through co-authorship of any publications as well as by name in the relevant section of reports, unless anonymity is requested.
- ❖ A copy of all raw data relating to Blackpool Zoo must be provided on completion of a study if requested. Blackpool Zoo reserves the right to use all data collected at the zoo for its own publications if they have not been published (or submitted for publication) elsewhere within one year of the termination of the research project. In such cases, acknowledgement of contribution and intellectual property will be given.
- ❖ Your details will be held in our database for our use only and will not be passed to third parties without your consent.
- Blackpool Zoo will not be held responsible for any problems arising from research carried out at the zoo.
- Any samples and / or video footage provided by Blackpool Zoo and anything derived from them, remain the property of Blackpool Zoo and will only be used for agreed research and education purposes. Any unused sample will be disposed of in accordance with standard procedures for the disposal of animal waste (Animal By-Products Regulations 2005 [amended 2009]).
- Blackpool Zoo will be informed, and must approve, prior to the transfer of any samples, research materials, or confidential information to a third party for research, and the third party will also be bound by this agreement





### Thank you! We look forward to hearing from you soon

#### References

BIAZA (2023) 'Our Association' [online] Available at: <a href="https://biaza.org.uk/our-association">https://biaza.org.uk/our-association</a> [Accessed on 03.01.2023].

DEFRA (2012) 'Secretary of State's Standards of Modern Zoo Practice' Bristol: DEFRA

Parques Reunidos (2023) 'About us' [online] Available at: <a href="https://www.parquesreunidos.com/en/the-group/about-us/">https://www.parquesreunidos.com/en/the-group/about-us/</a> [Accessed on 03.01.2023].

