

Priority Research 2019



Below is a list of priority areas for research at Blackpool Zoo. These priorities are essential in helping us continually improve and monitor our animals' welfare and as a result, applications received to complete one of these projects will be looked upon favourably.

If you would like to discuss undertaking one of these projects, please contact Jess at Research@blackpoolzoo.org.uk. If you have a research idea of your own please feel free to contact us, however please be aware that approval of projects is considerably more likely if it is selected from the Blackpool Zoo Priority Research List.

Birds

| Species | Topics | Timescale |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| African spoonbill (<i>Platalea alba</i>) | <ul style="list-style-type: none"> Activity budgets Group size influencing breeding | Any Jan - July |
| Scarlet ibis (<i>Eudocimus ruber</i>) | <ul style="list-style-type: none"> Activity budgets Group size effects on <i>intra</i> and <i>inter</i> species social behaviour | Any Any |
| Magellanic penguin (<i>Spheniscus magellanicus</i>) | <ul style="list-style-type: none"> Visitor number effects on behaviour and enclosure use Beach interferences and effects of visitor experiences on behaviour | Any Any |
| Stanley crane (<i>Grus paradise</i>) | <ul style="list-style-type: none"> Comparison of activity budgets between mixed-species and <i>intra</i> species enclosures | Any |

Invertebrates, reptiles and amphibians

| Species | Topics | Timescale |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------|
| Chinese water dragon (<i>Physignathus cocincinus</i>) | <ul style="list-style-type: none"> Enclosure usage and activity budget | Any |
| Cane toad (<i>Rhinella marina</i>) | <ul style="list-style-type: none"> Feeding behaviour Activity budget | Any Any |
| Royal python (<i>Python regius</i>) | <ul style="list-style-type: none"> Behaviour following handling during an educational session | Any |
| Madagascan hissing cockroach (<i>Gromphadorhina portentosa</i>) | <ul style="list-style-type: none"> Behaviour and enclosure usage following handling during an educational session | Any |
| Giant African land snail (<i>Achantina achantina</i>) | <ul style="list-style-type: none"> Growth rates Behaviour following handling during an educational session | Any |

Mammals

| Species | Topics | Timescale |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Giant anteater (<i>Myrmecophaga tridactyla</i>) | <ul style="list-style-type: none"> Sleep patterns Effects of environmental enrichment on male pacing behaviour | Any Any |
| Aardvark (<i>Orycteropus after</i>) | <ul style="list-style-type: none"> Sleep patterns Effects of environmental enrichment on behaviour Behaviour surrounding visitor experiences | Any Any Any |
| Brazilian tapir (<i>Tapirus terrestris</i>) | <ul style="list-style-type: none"> Behaviour comparison between temporary enclosure and reintroduction to the permanent enclosure Reproductive behaviour Thermographic imaging to detect oestrus (equipment required) | TBC March » March » |
| Giraffe (<i>Giraffa camelopardalis</i>) | <ul style="list-style-type: none"> Behaviour during peak and off peak seasons | August- October |
| Red-necked wallaby (<i>Macropus rufogriseus</i>) | <ul style="list-style-type: none"> Activity budget Behaviour prior to and following enclosure update Thermographic imaging to detect oestrus (equipment required) | Any TBC Any |
| Semi-domesticated reindeer (<i>Rangifer tarandus</i>) | <ul style="list-style-type: none"> Enclosure usage Breeding behaviour Social dynamics following increase in herd number Thermographic imaging to detect pregnancy (equipment required) | Any August » Any Jan - July |
| Bactrian camel (<i>Camelus bactrianus</i>) | <ul style="list-style-type: none"> Male behaviour pre, post and during rut Social dynamics Identification chart | Any Any Any |
| Asian short clawed otter (<i>Amblonyx cinereus</i>) | <ul style="list-style-type: none"> Activity budgets Causes of anticipatory behaviour | Any Any |
| Red panda (<i>Ailurus fulgens</i>) | <ul style="list-style-type: none"> Visitor effects Enclosure usage Nest box preferences Activity budgets | Any Any Any Any |
| Long-nosed potoroo (<i>Potorous tridactylus</i>) | <ul style="list-style-type: none"> Activity budgets Feeding preferences Social interaction | Any Any Any |
| Lesser hedgehog tenrec (<i>Echinops telfairi</i>) | <ul style="list-style-type: none"> Nocturnal activity budget and behaviour Nutrient content of diet and feeding preferences | Any Any |

Education

| Species | Topics | Timescale |
|----------|-----------------------------------------------------------------------------------------------------------------------|-----------|
| Visitors | <ul style="list-style-type: none"> Assessment of visitor conservation knowledge pre and post zoo visit | Any |

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|----------|---------------------------------------------------------------------------------------------------------------------------------|---------|
| Visitors | <ul style="list-style-type: none"> The effects of conservation station location and activities on donation rates | March » |
| Visitors | <ul style="list-style-type: none"> Attendance and dwell time during educational talks | Any |

Big cats

| Species | Topics | Timescale |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| African lion (<i>Panthera leo</i>) | <ul style="list-style-type: none"> Feeding anticipatory behaviour Social interactions and dominance Faecal testosterone sampling (funding required, MSc level) | Any Any Any |

Primates

| Species | Topics | Timescale |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Red titi monkey (<i>Calicebus discolor</i>) | <ul style="list-style-type: none"> Social dynamics of the groups, <i>intra</i>-pair interactions Outdoor enclosure usage | Any Any |
| White-faced saki monkey (<i>Pithecia pithecia</i>) | <ul style="list-style-type: none"> Social interactions and social dynamics | Any |
| Black-and-gold howler (<i>Alouatta caraya</i>) | <ul style="list-style-type: none"> Dominance, social dynamics and interactions Enclosure usage | Any Any |
| De Brazza monkey (<i>Cercopithecus neglectus</i>) | <ul style="list-style-type: none"> Faecal cortisol and visitor levels (MSc level) Effects of browse provision on agonistic behaviour Behaviour pre, post and during introduction of environmental enrichment | Any Any Any |
| Grey mouse lemur (<i>Microcebus murinus</i>) | <ul style="list-style-type: none"> Nocturnal behaviour and enclosure usage (camera trap required) | Any |
| Lemur (various) | <ul style="list-style-type: none"> 3D enclosure usage Behaviour comparison pre and post visitor experience <i>Inter</i> and <i>intra</i> species dominance | Any Any Any |
| Pileated gibbons (<i>Hylobates pileatus</i>) | <ul style="list-style-type: none"> Male agonistic behaviour within the group Comparative activity budgets between two enclosures Effects of environmental enrichment on behaviour | Any Any Any |
| Western lowland gorilla (<i>Gorilla gorilla gorilla</i>) | <ul style="list-style-type: none"> Female social hierarchy | Any |
| Bornean orangutan (<i>Pongo pygmaeus</i>) | <ul style="list-style-type: none"> 3D enclosure usage Environmental enrichment to encourage arboreal behaviour | Any Any |
| King colobus monkey (<i>Colobus polykomos</i>) | <ul style="list-style-type: none"> Identification chart Effects of browse provision on agonistic behaviour Behaviour pre, post and during introduction of environmental enrichment | Any Any Any |

Events

| Species | Topic | Timescale |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| California sea lion (<i>Zalophus californianus</i>) | <ul style="list-style-type: none"><li>• Affiliative and agnostic behaviours pre and post breeding season with no breeding male present<li>• Thermographic imaging to investigate external body temperatures through different seasons | February – August Any |