

Twycross Zoo undergraduate enrichment project protocol

Enrichment studies in zoos are very popular, and we are happy to host students wanting to conduct these projects. We would like to help you make sure your study provides suitable data for your project and that it is also of value to our keeper team here at the zoo. To this end, we have created the below guidance to support the development of high quality enrichment studies.

Initial considerations

We do not consider adding novel items to an enclosure to be particularly enriching in a zoo environment. Novelty has its place, but enrichment should enhance the welfare of the animals in some way. Start by considering what welfare enhancement you are hoping to achieve or measure.

Please review the SPIDER framework (<http://www.animalenrichment.org/spider/>) and pay particular attention to the section on setting goals. We expect a clear rationale for any enrichment you wish to try and do not accept studies that simply wish to observe animals on enrichment versus non-enrichment days/times, without a clear explanation of the goals of the specific enrichment being used.

We encourage applications that review new enrichment items, and will provide keeper expertise in developing the end item safely, but ideally you will generate the enrichment idea and where feasible/safe, provide any materials needed.

Enrichment project research questions

Please clearly define your research question. What is it that you want to know? This needs to be something that can be measured using the methods you will develop.

Some research questions we are interested in include:

- ? Does a defined enrichment programme achieve a set goal? (goals should be specific and it should be clear how they enhance animal welfare)
- ? Which enrichment items are most suited to achieving set enrichment goals?
- ? What placement options achieve optimal outputs for specified enrichment activities?
- ? What enrichment schedule is optimal for achieving set enrichment goals?

Before you submit your application form, make sure you have completed the below actions.

- Have you defined your specific research question?
- Have you identified specific enrichment goals for the enrichment you hope to use/test?
- Can you source the materials needed?
- Have you checked the enrichment items that you plan to use with Twycross Zoo's Research and Conservation Coordinator?
- Have you included a draft schedule for your study with your application? This helps us to understand how much staff time will be involved.
- Have you developed a suitable enrichment evaluation protocol?
- Do you have enough time to evaluate all of the enrichment effectively? See BIAZA Research Handbook for support developing a thorough methodology <https://biaza.org.uk/research-resources>