



## Exploring a diverse collection of bird nests and the arthropods that inhabited them

### Research and Collections

#### Project Summary

This project will involve imaging the Museum's diverse bird nest collection and documenting the different arthropods that might be preserved in them. The project has aspects relating to both natural history research and collections management.

#### Project Detail

Many arthropod groups are found occasionally or permanently inhabiting bird nests, often feeding on the organic matter produced by the bird hosts (such as feathers) and establishing symbiotic relationships with them.

OUMNH's nest collection is comprised of about 160 specimens of a wide range of shapes, sizes, and construction materials. A very preliminary search of the nests has shown they contain carpet beetles (dermestids) preserved in them, but it is unclear whether these colonised the nests as pests within the collections. It is also unclear what other arthropods these nests might contain.

**Full training will be provided** so that the student can:

1. Photograph the bird nests using a photographic stand with an attached camera and performing image stacking techniques
2. Catalogue the nest specimens using the Collection Management software, EMu
3. Prospect the nests for arthropods preserved in them
4. Explore the arthropods preserved in the nests through developing an extraction workflow
5. Photograph and perform preliminary identification of any arthropods
6. Establish criteria (preservation, taxonomy) to distinguish between arthropods that were caught together with the nests in their natural setting and potential collection pests
7. Write a 500-word report about the project



## Selection Criteria

### Essential

- Enthusiasm for nature
- Good manual dexterity
- Attention to detail with a methodical and organised approach to work
- Ability to perform repetitive tasks
- Ability to work independently or as part of a team

### Desirable

- Some knowledge of entomology and/or ornithology
- Interest in natural history collections and/or working in a museum setting
- Interest in photography

## Outcomes for the Student

This project provides particularly valuable experience for students interested in a career in museums and/or biodiversity research:

- Develop identification skills of different arthropod groups and bird nest diversity
- Training in photography and digitisation techniques as applied to natural history collections
- Improved knowledge of museums and collections care, as well as documentation

## Reasonable Adjustments

The museum is committed to making reasonable adjustments to its summer placements to make sure that students with disabilities or health conditions are not substantially disadvantaged. If you are concerned about meeting the selection criteria for a project of interest, or completing relevant tasks, please get in touch with [ella.mckelvey@oum.ox.ac.uk](mailto:ella.mckelvey@oum.ox.ac.uk) before submitting your application to discuss possible adjustments to the project.

## General Enquiries

To find out more about this project, please email [ella.mckelvey@oum.ox.ac.uk](mailto:ella.mckelvey@oum.ox.ac.uk)