



Cataloguing exceptionally preserved marine fossils from Silurian Hertfordshire

Collections and Research

Project Summary

The Museum has a collection of exceptionally preserved Silurian Hertfordshire Lagerstätte fossils. The aim of this project is to improve the consistency and accessibility of data these fossils by adding the collection to the Museum's digital Collection Management System (EMu).

Project Detail

The Silurian Hertfordshire Lagerstätte is a deposit of diverse and exceptionally preserved marine invertebrate fossils. These small fossils have been protected inside carbonate nodules for 430 million years and are preserved in three dimensions, often with soft tissues replicated in remarkable detail, including gill filaments and antennae a few microns in diameter. By studying the Hertfordshire fossils, we can learn a lot about the palaeobiology and evolutionary relationships of Silurian animals, providing a window into the evolution and diversification of early marine life.

The carbonate nodules are split manually to reveal any fossils enclosed inside. To date, we have found almost 4,000 specimens representing at least 60 new species. Details of existing specimens are currently stored in an online database that was set up over 15 years ago and no longer meets the Museum's standards of robustness and security. The student will therefore transfer data about these previously-discovered fossils from the old database into EMu. The student will also split open other Hertfordshire nodules to discover new fossil specimens.

Full training will be provided so that the student can:

1. Split open Hertfordshire nodules to locate new fossil specimens.
2. Familiarise themselves with the existing Hertfordshire Lagerstätte collection and the characteristics currently used to identify and describe the fossils in this collection.
3. Categorise, label, and photograph any newly-discovered specimens.
4. Create catalogue records for newly-discovered and previously-discovered specimens.
5. Improve the quality of data about previously-discovered specimens so it meets the Museum's current documentation standards (e.g. adding descriptions of the specimens).
6. Import data about newly- and previously-discovered fossils into EMu.
7. Import new and existing images of split nodules into EMu.
8. Create additional records in EMu for the people associated with the Lagerstätte collection and for the taxa commonly found in the collection.



Selection Criteria

Essential

- Excellent attention to detail with an organised and methodical approach
- Familiarity with Microsoft Office applications, in particular Microsoft Excel
- Good manual dexterity and ability to climb footstools and carry light loads (>5kg)
- Ability to work without close supervision and on an individual basis
- An interest in palaeontology collections

Desirable

- Experience working with databases
- Experience working with inventories or collections, or working in a museum setting

Outcomes for the Student

This project provides particularly valuable experience for students interested in a career in museums:

- Receive full training on the use of a Collections Management System (EMu).
- Develop good organisational, documentation, and IT skills.
- Improve knowledge of museums and collections documentation
- Gain practical experience working with museum collections including finding and cataloguing new specimens

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 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