

# GEOLOGY COLLECTION



## Introduction

The Art Gallery & Museum has a collection of around 14,000 geological specimens - fossils, rocks, minerals, gemstones, ores, ornamental stones, soil samples, gravels and borehole cores. Most are from British sites, particularly from the Cheltenham area but some are from far-away places like Africa, South America and Antarctica. They vary in age from around 600 million years to just a few years old. Some are of great scientific interest as they hold clues to the Earth's exciting past but others are just beautiful objects.

The strength of the collection lies in its variety of local Jurassic fossils and rocks. Many of these specimens were collected over 100 year ago and are from sites that no longer exist today.



Extinct Silurian 'pineapple' coral, *Acervularia annas*

## History of the Collection

Geological specimens have formed part of the displays since the Museum opened in 1907. The origins of the collection can be traced back to 1888 when Charles Pierson presented the town with a 'large collection of fossils'.

After the opening of the Museum the collection grew rapidly, with many generous donations from well-known local geologists including S S Buckman, J W Gray, L Richardson, R P Wild and C R Mapp. Other important gifts included New Zealand and Antarctic specimens collected by Raymond Priestley. They were given by Dr E T Wilson, father of Dr E A Wilson, the Antarctic explorer. Specimens were also purchased, including minerals from the collection of the famous engineer Robert Stephenson.

## Fossils

Over 60% of the geology collection are fossils and they represent most parts of the stratigraphical column from the Cambrian to Quaternary. Nearly all are from British sites but amongst the few foreign specimens are Eocene molluscs from the Paris Basin and Carboniferous sea lilies from North America.



Jurassic ammonite, sea snail and bivalve

The fossils are mainly invertebrates (animals without backbones) and they provide excellent examples of most groups. The major interest lies in the Jurassic fossils, particularly brachiopods, bivalves, ammonites, belemnites, bryozoans, insects and serpulid worms from the Vale of the Severn and the Cotswolds. One of the most important personal collections is that of Linsdall Richardson; his large collection of brachiopods also contains excellent comparative material from other British sites.

Amongst the vertebrate fossils are sharks' teeth, ichthyosaur and pterosaur remains, whale bones and mammoth teeth. Although few in numbers, they are the most spectacular specimens in the collection. The Museum also has a plaster cast of an ichthyosaur, one of the few remaining casts of an original destroyed in an air-raid on Bristol City Museum in 1940.



**Skull and jaws of a Jurassic ichthyosaur**



**Nodule containing a frond of a Carboniferous seed fern**

The few plant fossils are mainly Upper Carboniferous horsetails, seed ferns and clubmosses.

## Minerals and Rocks

This section has over 3,000 specimens which provide good examples of the huge variety of rocks and minerals that form the surface of our planet – crystals, gemstones, precious metals, mineral ores, gemstones, volcanic rocks, granites, limestones, coals, gravels and soils.



**Colourful and beautiful minerals**



**Samples of rocks showing different textures**

The specimens have been collected from all over the world – from mines in Africa, mountains in South America, lava flows in Italy, to the polar icefield of Antarctica. The majority of British rocks are from the Cheltenham area. They include important borehole samples donated by Linsdall Richardson and a large collection of Quaternary sands and gravels from the Cotswolds and Malvern area made by J W Gray.

The small mineral collection has a reasonable range of common minerals. Most of the minerals appear to have been collected in the 19<sup>th</sup> century but there is little site or donor information.

## Access to view

Only a small proportion of the geology collection is on display here in the Summerfield galleries. Some of the Antarctic rocks can also be seen in Gallery 3. To find out more about the geology collection held by the museum contact: The Collections Manager, Cheltenham Art Gallery & Museum, Clarence Street, Cheltenham GL50 3JT Tel: 01242 237431

Email: [artGallery@cheltenham.gov.uk](mailto:artGallery@cheltenham.gov.uk)

Visit our website: [www.cheltenham.artgallery.museum](http://www.cheltenham.artgallery.museum)

