## **DarwIN Shrewsbury Festival 2021**

Taking Stock of the World: The Foundations of Shropshire's Museums and Nineteenth Century Collecting





Blackbird Skull (SHCMS: Z.00698)

Shropshire Museums cares for over 45,000 geology specimens, (including fossils, rocks and minerals) and around 80,000 biology specimens (including birds, mammals, insects, fish and plants). Our collections include specimens from all over the world as well as many collected locally. This invaluable resource is stored at our Collections Centre in Ludlow; a purposebuilt, environmentally controlled, museum store with research and education spaces on site.

By the mid-eighteenth century, antiquarians and early naturalists were forming societies to compare their collections, discuss their research and debate their most recent findings. The Lunar Society was one such group of industrialists and intellectuals from across the Midlands who met regularly between 1765 and 1813 in Birmingham. One of the founding members was Erasmus Darwin of Lichfield; Charles Darwin's grandfather. However, it was during the Victorian period that scientific collecting really developed as people began to collect in earnest in order to categorise and understand the world around them.

The Ludlow Natural History Society was founded in 1833. Two years later, the Shropshire and North Wales Natural History and Antiquarian Society was founded in Shrewsbury. Both these societies soon created museums to share their collections and make them available to other antiquarians and leading scientists of the day.

Follow this link for a detailed account of the <u>Ludlow Natural History Society Collection 1833-1941</u>
Follow this link for a detailed account of the <u>Shrewsbury Museum Collection 1835-2008</u>

### The Importance of Shropshire's Early Museum Collections

One important scientist was Roderick Murchison who used Ludlow's collections to underpin his ideas which helped shape modern geology. In 1831 he came to the English-Welsh border to study stratigraphy and establish a definite order of succession for the local rocks. Whilst visiting the area, Murchison also met with <u>Dr Thomas Lloyd</u>, the discoverer of the Ludlow Bone Bed, and with William Jones, a prolific collector of rocks around Ludlow. Both men were members of an informal group of naturalists who had been interested in the study of local geology. Murchison and these naturalists helped each other in their research. The stimulus given by Murchison's interest encouraged these men to formally found the Ludlow Natural History Society and to establish a museum in Ludlow.



Geological section sketched by Roderick Murchison, to illustrate a lecture giving in 1852 to the Ludlow Natural History Society. (SHCMS: G.20655)

The result of Murchison's studies was his Silurian System, which identifies and groups rocks by specific formations and distinctive fossils and was published in 1839. A copy was donated to the new

Ludlow Museum library. The rocks and fossils Ludlow's early geologists had collected has led to modern geologists still using Shropshire place names to denote some geological periods.

#### The Early Collectors

The early accession registers kept by Ludlow Museum and Shrewsbury Museum give an idea of the range of objects being donated in the museums' early years. These books list every object given to the museum and who had deposited it. Several of these donors were key figures in the founding of Shrewsbury Museum and contemporaries of Darwin.

William Allport Leighton and Thomas Campbell Eyton both knew Darwin and were at Cambridge University at the same time as him. They were all students of Professor Henslow who influenced their thinking, encouraging an interest in the new sciences of botany and geology.



Leighton, Eyton and Darwin all graduated from Cambridge between 1831-33. On graduating, Darwin left Shrewsbury to join the HMS Beagle expedition — a trip that was the catalyst to the development of his ideas around the theory of evolution. Not long after graduating and returning to Shrewsbury, William Allport Leighton founded Shrewsbury Museum.

In 1841, Leighton's collecting of plant specimens resulted in the publication of his 'Flora of Shropshire' – the first scientific study of the county's plants. Both Leighton and Eyton had donated many plant specimens collected across Shropshire and North Wales to the new museum. These herbarium sheets are an important record of plant distribution during the period. Eyton's research focus was birds and he published his 'History of the Rarer British Birds' in 1836. He donated many bird specimens and eggs to the collection.

True Bulrush Collected by Leighton (SHYMS: B/2006/1828)

We know that Charles Darwin was told about the Society's formation by his university colleagues while he was on working as the naturalist on the voyage of The Beagle. Darwin became a museum member on his return to Britain. He was made an honorary member in 1842. A bronze statue to him was unveiled in 1897 outside the museum building which had once been home to Shrewsbury School, where the young Darwin had been a pupil.



The Unveiling of Charles Darwin's Statue (SHYMS: P/2006/0011)

#### **Other Contemporaries of Darwin**

Many other museum members and donors were contemporaries and must have known Darwin as a young man. Henry Blunt was the son of a local chemist who had supplied Charles' father, Robert Darwin. The Darwin family, including the children, would have bought equipment and supplies for their notorious experiments. Henry Blunt was just three years older than Charles. The young boys must surely have run into each other at the shop and shared their mutual love for science.

Blunt was later to become an accomplished astronomer and artist. He was the first person to model the surface of the moon in three dimensions and his work was exhibited at the Great Exhibition in 1851.



Henry Blunt by J.C. Pardon SHYMS: FA/1991/037/02



Henry Shaw's Shop @Shropshire Archives

Another local man who worked alongside Shrewsbury's early scientists was Henry Shaw. Henry had taken on his father's taxidermy business in the town. He was a keen fisherman and hunter. His taxidermy skills were in great demand and he mounted many specimens for men like Eyton. He also donated several specimens to Shrewsbury Museum over the years.

#### A Very Modern Museum

Shropshire's new museums were not fusty places full of old men! In 1840, the UK had only 45 museums – not every major town or city had a museum and Shropshire had several! William Penny Brookes founded a museum at Much Wenlock in 1852 as part of his Olympian Society, created to improve the health and education of working men. Towns like Ellesmere and Whitchurch soon followed the museum trend.

These museum founders were young men of science, fresh out of university with big ideas. They wanted to create a museum that was at the cutting edge of scientific research. In Shrewsbury they envisaged a museum with a reading room which would receive all the latest research news by telegraph as well as leading journals and papers by post. Members like Charles Darwin added their most recent publications to the library. The museum committee invited speakers from across the country to come and talk to members about new ideas and developments in the sciences.

Shrewsbury Museum employed its first paid curator in 1836, at a time when many larger museums were still run by keen amateurs. John Gilbert had been the taxidermist at the Zoological Society of London. Unfortunately, the Museum Committee did not approve of his wife living at the museum and so he was dismissed. However, Gilbert went on to become a prominent collector and explorer. There are examples of his specimens in museums all over the world.

### **Historic Collections and Contemporary Research**

Only a small percentage of Shropshire Museums' collections is on display at any one time. However, the many thousands of specimens in store are still in active use for research and study. In 2018, researchers from the University of Southern Mississippi visited Ludlow to take DNA samples from our six sawfish snouts.



DNA sampling of a sawfish snout

Sawfish are currently one of the most endangered species of ray. Little is known about them and scientists are trying to establish how their genetic diversity may have changed over time. Currently, sawfish have a very low genetic diversity which makes it harder for them to adapt as a species. Less variety in the species means fewer novel adaptations which may favour the species in a new or changing environment. Historic collections like ours are a key to understanding whether human impact has reduced their genetic diversity over time or whether it has always been low. Research like this shows that museum collections are still an active research resource.

#### **Collecting Today**

Museums are constantly evolving and changing how and why they collect. Today Shropshire Museums' Curatorial Team think carefully about what we collect, how we collect it and most importantly, why. We do not have unlimited space or resources. Neither do we want our collecting to impact upon the biological diversity we are trying to both record and explain for people. Nowadays, we do not go out to actively collect specimens but rather focus on supporting the collection of biological data. However, our actions will shape how collections can benefit science in the future. Our decision not to collect physical specimens today will reduce the availability of twenty-first century DNA samples in the future. Are there ways in which these collections and the information they hold might be used in the future which we cannot imagine today?

# SHROPSHIRE MUSEUMS



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