

On Our Doorstep

We have a site of special scientific interest here in Bridge of Allan

BY ALLAN BROWN

The old quarry which lies in the woods next to where Sunnyslaw Road and Glen Road meet is a cold and sombre place. The sun never really reaches into the innermost rocks. Welcome to Wolf's Hole, our own site of scientific interest.

Tom Kerr of the Stirling RIGS Group* explains "Wolf's Hole Quarry was designated as a Site of Special Scientific Interest (SSSI) on account of the fragments of strange fossil fish called ostracoderms. These fish lived in rivers more than 400 million years ago (Lower Devonian Era). They were primitive jawless creatures covered with an armour of bony plates."

"The cliff is formed of sandstones that were laid down by a very large braided river at a time when Scotland was about 10 degrees south of the equator. You can see where successive river channels have cut into older ones by noticing the strings of black basalt lava pebbles at the base of each fresh channel and the cross bedding that indicates how an older channel has been cut into by a newer one. At the time of these deposits the surrounding landscape would have been arid with flash floods and few if any plants to soak up the rain fall. What are now the Ochil Hills were then active volcanoes and a late black basalt lava flow can be seen at the top of the sandstone and traced in the woods above.

"The quarry provided building stone for much of Bridge of Allan in the 19th century, but was last worked in 1899. The name 'Wolf's Hole' is thought by some to be a corruption of the term 'Wool's Fold' from a time when sheep were penned there."

It was the Reverend Hugh Mitchell (1822-1894), a minister from Montrose, who discovered the fossils in the 1860s. Mitchell was quite renowned, having made many discoveries in Angus and Perthshire. This was of course around the time of Darwin, when his book *On the Origin of Species* caused ructions through the land. This may explain why a man of the cloth was poking about



The fossil fish *Securiapsis Caledonica*
By kind permission Perth City Museum

the quarry looking for fossils. And find them he did.

I tracked them down to Perth Museum, and I am very grateful to Mark Simmons there for arranging viewing. You would be forgiven for realising these are

important - they just appear (to the layman) as small blemishes.

In 1963 one fossil (opposite) was examined by fossil fish expert Dr Errol White of the British Museum (Natural History). He realised this was new to science and gave it the scientific name *Securiapsis Caledonica*. Another fish, *Pteraspis mitchelli*, was found here and named after Mitchell himself.

Nevertheless it was a great thrill to be able to touch them and connect with the long-distant past.

Mark was also able to tell me that the Museum Hall closed as a museum in 1936, and several of the artefacts there were purchased by Perth Museum. We don't know if the Reverend Mitchell's fossils were among those purchased or whether he gifted them himself. Other artefacts included in the purchase was a painting, *A Village Fair*, attributed to the Breugel School. We may come back to this subject in a future edition.

* *Regionally Important Geological and Geomorphological Sites*



Life in Devonian Times

We think of Devon as being a warm and pleasant place. It was far from that in Devonian times 400 million or so years ago. As Tom Kerr explains Scotland wasn't where it is today - it was much further south, around the equator. It would be hard to pick it out of the land mass called Pangea. Travel back to that time and you'd be alone, with no mammals of any sort for company. And you would need to watch your step - there were plenty of spiders, insects and crabs ready to have their first taste of human flesh!