

Scottish Stone Liaison Group

NEWSLETTER

Indigenous Materials Project Team

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Cullaloe Sandstone

Congratulations

to Tradstocks Ltd for pursuing its successful planning application to re-open Cullaloe Quarry, Fife.

Cullaloe stone is an excellent replacement for the now no longer available Craigleith sandstone (Why? – see below) and therefore its return to the market will be welcomed by those responsible for the appropriate repair and maintenance of Edinburgh's, and Fife's, built heritage.

The Scottish Stone Liaison Group met with the mineral rights holder and then sought to identify a commercial company that would be interested in pursuing this issue. Having brought the two parties together the SSLG was delighted that Tradstocks Ltd undertook a test extraction and then pursued its interest through to a planning application.



Why is it so important?

The Craigleith sandstone quarry, having been built over, presented those responsible for the appropriate maintenance and repair of much of Edinburgh's New Town with serious challenges.

As was demonstrated by Dr Ewan Hyslop ([British Geological Survey](#)) at the SSLG's seminars entitled "*From Geology to Building*", the selection of the most appropriate replacement stones for any indenting repairs was an issue that could not be taken lightly.

Often "colour" determines decision

Setting aside the simple, but virtually irrelevant matter of colour, sandstones, due to the differences in the structures and composition, can perform very differently in the built environment. A simple example - those with a higher porosity will



*Sample of an early extraction test
September 2003*

"The rest is history" as they say but the importance of this step cannot be understated and the SSLG is glad that it had some small part to play in this development. We wish them well in their endeavours and will seek to report on this success story in future Newsletters.

absorb water while those with a greater clay content will shed water.

Where a building has been constructed with a stone with the former, difficulties will subsequently arise if any indent material has a greater clay content as that stone will simply shed water on to the stones below which have the greater capacity to absorb water. The outcome of this "double soaking" leads to an acceleration of the decay mechanisms that may well result in distress and even failure of these neighbouring stones.

One repair effectively actually induces another!

Another quarry application

In addition to the developments at Cullaloe, [Block Stone Ltd](#) has submitted an application to Perth & Kinross Council to open a new quarry near Blairingone, close to Dollar. The Scottish Stone Liaison Group has lent its support to this application and it is understood that this will be before the appropriate Council committee in the near future.

Slate

The report of the [University of Paisley](#) on the slate samples secured from Foudland, near Huntly, indicate that it is a good material but, as with the slate samples from Khartoum Quarry, Ballachulish, does not split very well.

The final reports of the two exercises have been presented to Historic Scotland – with copies being provided to the other funders ([Highland Council](#) and the [Lochaber Enterprise Company](#)). It is understood that the reports will be published in the near future.

What next?

Since the results of the two tests have indicated the material samples are good, it has been resolved that a coring exercise should be undertaken at the Khartoum Quarry and, following consultations with the local Community Council, monies have been secured for this particular exercise. This action is being pursued as the general consensus is that slate gets better as it gets deeper and this coring exercise will determine if this holds true for the Khartoum Quarry.

At the time of going to press no date has yet been set but it is anticipated that this will be undertaken this Spring with the samples secured again being submitted to the University of Paisley for analysis.

Carmyllie

Scotland had, at one time, a thriving sandstone paving and roofing material operation in the Carmyllie area of Angus. It was so productive that

The "threat" of imported sandstone paving either to replace the universal concrete paving materials and perhaps old Scottish sandstone paving, is

a railway line was constructed from the Carmyllie quarry all the way to Arbroath simply to facilitate transport links.

However, railway communications were somewhat of a double edged sword as they brought in Welsh slate to this area of Angus where previously no slate had been used (see [Indigenous Materials Newsletter No. 5](#) - photograph of steadings at Pitmuies House). The effect was that Welsh slate quickly became the dominant roofing material and the neighbouring market for the sandstone roofing "slates" rapidly declined.

Finished products from the Carmyllie quarries were also exported by sea from Arbroath and have been used in Germany but, without trawling through the records, it has not been possible to identify the final points of use.

Not all markets however were overseas and the SSLG is aware that there are properties in the east coast of Scotland that would benefit from fresh supplies of Carmyllie roofing materials, not to mention the dimensional blocks for paving, steps and plats.

With many plats now in need of replacement, the opening of a new resource at or around Carmyllie would certainly be welcomed.

Carmyllie sandstone flags have been used for paving in many town centres but today there are only a few pockets where it is possible to see the ageing processes of these pavements and appreciate how much they enhance the visual quality of the built heritage.

one that is currently being confronted as Edinburgh is seeking to repave areas of the New Town.

Following SSLG representations, agreement was reached for Carmyllie flagstone to be introduced into the street test providing it was shown to be of the required standard – this it certainly did.

But conservation needs alone will not sustain a modern quarry and contracts such as this could be the catalyst for the development of these Carmyllie quarries. With the value of townscapes and surrounding built heritage being recognised for both the residents and tourism, the need for such indigenous materials for the replacement of the uniform standard concrete block can only gather pace. If sandstone is the requirement for such paving then it is possible, unless new Scottish supplies are identified, that stone from Yorkshire or even further afield – possibly China – will be used. Were this to happen, one could justifiably ask how such would fit into the modern policies of sustainability, energy use and whole life costings? That is also setting aside the issue of availability of additional supplies to effect any necessary repairs.

Fortunately interest is being maintained as another development in the Carmyllie area is showing promise.

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