Introduction

Smailholm Tower [NT 638 346], constructed of local basalt with red, Devonian sandstone door arches, window surrounds and quoins. P596389.
Ruins of Sweetheart Abbey, 10 km to the south of Dumfries, constructed of Permian red sandstone from the Locharbriggs Sandstone Formation. P596386.

Granite from the Criffel Pluton at Craignair Quarry, Dalbeattie (P521374). P521374.

Sett making at Craignair Quarry, Dalbeattie,
Throughout the south of Scotland, local building stone has been used from early times, for example in the construction of defensive Iron Age earthworks, but a more organised extraction and distribution system was required in medieval times to allow construction of castles and the Border abbeys. Castles and defensive tower houses were usually built mainly from locally available rock rubble, but with dressed features such as corner stones and lintels carved from softer sandstone sourced farther afield if necessary. A good example is provided by Smailholm Tower, a 15th century Borders tower house near Kelso (P596389), which is largely built of the local Carboniferous basalt, with the red sandstone dressed features made from Devonian sandstone.

Sandstone quarrying on a substantial scale was clearly in progress during the construction of the Border abbeys, for which a large quantity of dressed building stone was required. Local sources were exploited. For example, work on Sweetheart Abbey, to the south of Dumfries, started in 1273 utilising the local, red Permian sandstone (P596386). Farther east, Dryburgh Abbey had a protracted history of construction between the 12th and 16th centuries using the local Devonian sandstone, mostly a cross-bedded and a warm pinkish grey variety that was most probably sourced locally from long-disused quarries at Ploughlands (NT 633 307). Melrose Abbey had a similarly protracted history of building, alteration and rebuilding, closely bound up with the destruction caused during intermittent warfare and cross-border skirmishing on the frontier with England, only 40 km to the south, during the 14th, 15th and 16th centuries. Much of the earlier construction work in the 12th and 13th centuries utilised a brown to grey-green volcanic agglomerate obtained from the nearby Chiefewood volcanic neck; of the two likely quarry sites, the closest (NT 339 542) is only about 700 m from the abbey. This quarry continued in use until the early 20th century. The later phases of construction at Melrose used a wider range of local rock types, including various Devonian sandstones, at least some of which were probably obtained at Bourjo (NT 548 327) on the north-west flank of the Eildon Hills, and some igneous rocks from the Eildon Hills Carboniferous intrusion.

In the urban landscape, granite buildings are concentrated, not unexpectedly, in the vicinity of the main granite plutons in the south-west, and so are especially numerous in the Galloway towns. Dumfries, however, has a plethora of fine buildings built from the local Permian red sandstone, as presently quarried at Locharbriggs. Carboniferous sandstones were extensively worked in the eastern part of the region, producing a variety of attractive pink and pale grey building stones that are well represented in Borders towns.

**Granite**

The largest of the Galloway granite quarries, near Dalbeattie, worked the Crieffel intrusion, whose coastal location assisted transport of the extracted stone. Large quantities of building

**Lower Palaeozoic sandstone**

and dimension stone were exported and used in cities on the west coast of Britain for major engineering works such as the construction of Liverpool Docks. At the peak of output, around 1900, the quarries employed about 400 men. A granite from Kirkmabreck, Cree-town — known commercially as Silver-Grey (a similar granite from Dalbeattie is shown in P521374) — also makes an attractively speckled ornamental stone when polished. Many of the Galloway towns — Dalbeattie, Castle Douglas, Creetown, Gatehouse of Fleet, Newton Stewart — contain fine examples of granite buildings. However, despite this wide use of the stone for building purposes, granite setts for road building were traditionally the principal output of the Dalbeattie quarries (P000110).
Since most of the area is underlain by Lower Palaeozoic sandstones, it is inevitable that these rocks are used in many buildings. However, it is not an easy stone to work, generally lacking an orthogonal set of joints, so that much of the walling is built using irregular rubble held together by lime mortar. Only in relatively few instances, such as some high-value buildings in places like Moffat, Peebles and Innerleithen, is the wacke sandstone roughly squared into blocks, and even here they are only used for the main wall panels rather than for door and window jambs and quoins.

The Ordovician Shinnel Formation is characterised by the thick sequences of laminated grey siltstone that are interbedded with the more abundant sandstone. However, in the Leadhills area the siltstone is locally the dominant lithology and is there known informally as the ‘Lowther Shales’. A bed-parallel cleavage is commonly developed in these siltstones and they have consequently been worked as an inferior roofing ‘slate’ in numerous small and medium-sized quarries, now all disused; Stobo Quarry (NT 158 365), about 7 km west-south-west from Peebles, is the largest of these.

**Devonian and Carboniferous sandstones**

The Devonian sandstones of the eastern Borders region are typically red-brown, though there is considerable variation in colour locally. The stone was quarried in a large number of locations around larger towns such as Jedburgh, Melrose, Coldstream, Hawick and Kelso, and used therein for building. The generally grey to buff and pale brown sandstones of Carboniferous age in the eastern Borders have also been extensively quarried for building stone and used widely in towns such as Duns and Kelso. Many of the older buildings in Langholm are constructed from the local White Sandstone. Throughout the region, the sandstones have been quarried on a small scale for local use in the villages and farms, and their natural variation enhances the vernacular architecture and its contribution to the landscape.

Now, at the beginning of the 21st century, an attractive honey-coloured stone is being quarried on a small scale near Swinton (NT 854 486) with sawn and other worked blocks produced for both modern building and replacement work. Stone was first produced on a significant scale from the Swinton quarries in the 1790s, and much was used for construction work in Edinburgh in the late 19th and early 20th centuries. After a period of disuse, Swinton Quarry was reopened at the end of the 20th century.

**Permian and Triassic sandstones**

The attractive, bright red Permian sandstones of the Dumfries and Lochmaben basins have long been worked for building stone and it has been exported widely from quarries such as Locharbriggs (NX 990 810) at Dumfries and Corncockle (NY 085 870) near Lochmaben. Many of the public buildings in nearby towns such as Dumfries and Lockerbie were inevitably constructed with this stone. In the Dumfries Basin, the Locharbriggs Sandstone Formation was worked, and in the Lochmaben Basin, the Corncockle Sandstone Formation was utilised. A similar lithology in the Thornhill Basin, from the Thornhill Sandstone Formation, was quarried at Gatelawbridge (NX 902 965) and Closeburn (NX 892 910).

Some of the modern quarries working the Permian sandstone were active as early as the 17th century, but saw a rapid expansion during the late 19th century as the railway network developed and provided a ready means of transport. The red sandstone was particularly popular for the expanding urban areas in the central belt of Scotland, and fine examples of its use as a building stone can be seen in both Edinburgh and Glasgow. Much stone was also exported to other parts of the UK and as far afield as North America. During the peak period of production, around 1900, the Locharbriggs quarry employed about 260 men. Thereafter production of sandstone declined in the
south of Scotland, and had virtually ceased in the late 20th century, by when most of the quarries had closed. However, Locharbriggs and Corncockle continued to be worked intermittently, so maintaining supply, and at the beginning of the 21st century are satisfying an upsurge in demand from both modern building and restoration work; Newton Quarry at Gatelawbridge is also intermittently active.

The Triassic St Bees Sandstone was worked in quarries at Corsehill (NY 205 701) and Cove (NY 254 710), which supplied much local building stone to Annan and Gretna. Corsehill sandstone was widely used in Scottish cities from the late 19th century onwards, with the Cove quarry still active early in the 21st century.

**Bibliography**


