Geology of the Crail area

Cranleigh is an example of local rocks in the

Building Stones of Crail

Many of the older buildings in Crail are built of reddish - purple sandstones obtained from Craighhead Quarry near Fife Ness. The red colour is due to the presence of iron oxides (rust).

Once rail transport became established, stone could come from further afield. There is evidence in the town of red sandstone from near Dunfries. Grey roof slates could have come from Ballachulish by ship. Dolerite sets seen around the harbour may have come from Ballachulish Quarry near Arrochar. Green slates in Crail are likely to have come from near Dunkeld in Perthshire.

Red granite seen in the fountain resembles that quarried at the Ross of Mull, while a greyish granite is similar to that extracted from near Dalbeattie, Dumfries & Galloway.

GLOSSARY

Basalt: a fine-grained volcanic lava. It is rich in iron and magnesium minerals.
Dolerite: a coarser grained version of basalt.
Granite: a coarse-grained rock which cooled slowly from molten magma deep underground. It is rich in sodium, potassium and silica minerals.
Limestone: a rock composed mainly of calcium carbonate and often containing fossils.
Sandstone: a rock formed by the deposition and accumulation of sand grains.
Shale: a rock made of mud laid down in relatively quiet water.
**Locality 1**
Crail Kirk

The original church was built in the 1150's and the tower added in the early 1200's. The present south facade was rebuilt in 1815. The tower is built of rough hewn blocks of reddish-purple sandstone, probably from Craighead quarry.

**Locality 2**
9 Marketgate

This house was developed from 2 pre-existing cottages in 1686. It is made of rough hewn sandstone, probably from Craighead Quarry. (When viewing this locality, please respect the privacy of the inhabitants).

**Locality 3**
Memorial, Marketgate

This memorial fountain was built in 1897 and is dedicated to Queen Victoria’s Diamond Jubilee. It is built of granite, one red and one grey.

**Locality 4**
Tolbooth, Marketgate

The Tolbooth was built in 1598 and the tower rebuilt in 1776. The rectangular shaped blocks of the tower indicate its importance relative to the rough cut stone of earlier buildings.

Outside the entrance to the churchyard on the west side of the parking area, there is a large boulder of dolerite. It is known as the “Blue Stane”. It is a glacial erratic deposited by melting glaciers at the end of the last Ice Age, about 10,000 years ago.

**Locality 5**
Tolbooth Wynd

This wall on the north side of the ramp leading down to the East shore has an interesting stone coloured yellowish-brown.

**Locality 6**
Harbour

Sandstones sometimes display evidence of ripples which formed on a beach 335 million years ago.

A closer look at the sandstone blocks in the Tolbooth show details of layers in the rock and also different colours, suggesting different sources. The building across the road, seen on the left of the upper picture (*), contains blocks of red sandstone in the window sills which is typical of sandstone from Locharbriggs Quarry, Dumfries.

Pantiles are S-shaped clay tiles. Originally imported from the Low Countries by the shipping trade, later tiles were made from local Late-Glacial marine clays.

**Locality 7**
Sea shore

<From the Harbour, retracing your steps up the steep road and at the sharp left-hand bend, go up the steps ahead. Follow the path around the castle walls. At the end of Castle Walk, take the steps to join the coastal path. Look down onto the beach to see various rock formations.>

**Locality 8**
Priory Doocot

<At the Doocot, take the path uphill. The Doocot door is open most days.>

Local rocks comprise layers of sandstone, shale and limestone.