

The Royal Burgh of Falkland in Fife was established in 1458, when life centred around the Royal Palace and its policies.

The earliest stone buildings would have depended on locally-derived stone, transported by horse and cart. With the advent of the railways in the mid-19th century, stone could be sourced from further afield.

This leaflet looks at selected stone buildings and explains the type of stone, its use and its possible source.

Geological History of the Lomonds area

The oldest rocks of the Lomond Hills area were formed during the later part of the Devonian period, 410-354 million years (Ma) ago. They comprise sedimentary rocks (mostly sandstones) deposited when this area was in southern desert latitudes and drifting northwards. Sandstones contain evidence of desert sands and dry soil horizons.

Most of the rocks in the area formed during the Carboniferous Period, 354 -299 Ma, at a time when this part of the Earth lay close to the Equator. The landscape was dominated by rivers carrying sediment eroded from the Highlands into deltas and lagoons, as in the Irrawaddy delta today. These layers of sediment now form sandstone and shale. Evidence of lush tropical forests is found in coal seams. Occasionally the sea would flood low lying areas and limestone was deposited, preserving fossils of shells, "sea lilies" (crinoids) and corals. A lime kiln near the East Lomond tells of lime-burning activity to supply the building and agricultural markets.

The Lomond Hills, the Bishop Hill and Benarty are the result of the intrusion 307 Ma ago of a layer of magma (molten rock) between the layers of sedimentary rock, to form a quartz dolerite sill. Dolerite is a very hard, dense and dark-coloured rock, known in the

quarrying trade as whinstone. A fine grained version of dolerite is called basalt. Rock overlying the sill has mostly been eroded away, and the hard dolerite has protected the underlying sedimentary rock from later erosion. The sill forms the ridge between the Lomonds, the shoulder at the west end of the West Lomond, and the upper parts of the Bishop Hill and Benarty. The Lomond Hills peaks, which dominate the Fife skyline, are two extinct volcanic necks, the pipes up which ash and olivine dolerite lava were erupted about 297 Ma ago. These are the youngest volcanic rocks in the region.

The area was covered by ice between 19,000 and 13,000 years ago, which sculpted the underlying landscape. Recent wind erosion has carved spectacular pillars out of friable sandstones.



Lime kiln near East Lomond

Local Quarries

Before the advent of railways in the area (1847) building stone would have come from local quarries:

- Craigmead (sandstone). [NO2280.0610]
- Craigmead (dolerite). [NO2300.0630]
- Falklandhill (sandstone). [NO2280.0620]
- Freuchie (sandstone). [NO2290.0640]
- Purin Hill (sandstone). [NO2535.0655]

Kingoodie, Dundee (sandstone) was part of the Crown Estates in the 16th C and may have been quarried for royal buildings. [NO338.295]

Glossary

BASALT: A fine-grained igneous rock containing calcium, aluminium, iron and magnesium-rich silicate minerals

DOLERITE: A coarser-grained igneous rock containing calcium, aluminium, iron and magnesium-rich silicate minerals

LIMESTONE: A rock made up of calcium carbonate often containing fossils

MA: Mega anni, meaning million years

OLIVINE DOLERITE: Dolerite which contains the mineral olivine, an iron and magnesium silicate.

QUARTZ DOLERITE: Dolerite which contains the mineral quartz, silicon dioxide.

SANDSTONE: A rock formed by the accumulation of quartz grains.

SHALE: A rock formed mostly from mud.

WHINSTONE: A quarrying term for basalt or dolerite.

Description

The walk meanders through the wynds and closes of the historic Royal Burgh of Falkland, every turn providing a fascinating insight in to Falkland through the ages. Free car parking can found off Back Wynd.

Terrain

The walk is situated within central Falkland, made up of paved and cobbled surfaces in the main. Due to the narrow nature of the streets; walkers may need to walk the road surface to travel between points of interest.



Walk duration:
0.33 mile/0.5 km
30 mins

Further Information

The Living Lomonds Landscape Partnership is an association of organisations in Fife and Perth & Kinross.

Our aim is to re-connect people with the living legacy of the Lomond and Benarty Hills through a range of community based activities, volunteering opportunities and projects.

Visit the Living Lomonds website www.livinglomonds.org.uk to print more copies of this leaflet and geological walks in the area.

- geoHeritage Fife was set up in 2000 to:
- publicise Fife's geological heritage
 - provide educational resources in geology
 - promote geotourism

geoHeritage Fife
01334 828623
Scottish Charity No. SC 032509

Fife Local Geodiversity Sites (LGS) is concerned with identifying and assessing important sites and notifying the statutory planning authority of these sites. Fife RIGS was incorporated into geoHeritage Fife in 2005.

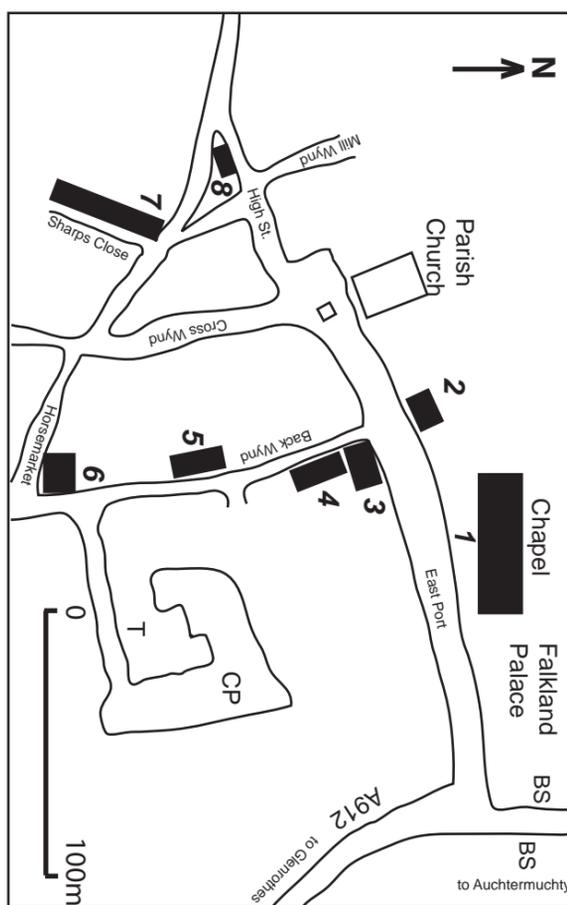
Travel Information

By road: Falkland lies on the A912 between the New Inn roundabout on the A92 and the A91 at Strathmiglo or Auchtermuchty.

By bus: Stagecoach services 36 (Glenrothes to Perth) and service 64 (St.Andrews to Glenrothes)

Safety Information

As this is an urban trail, be aware of traffic on narrow roads and lanes. Use the pedestrian crossings if crossing the main A912 road. The cobbled lanes are uneven underfoot.



T Toilets CP Car Park BS Bus stop



KINBURN (St Andrews) CHARITABLE TRUST



Building Stones of Falkland a geological perspective



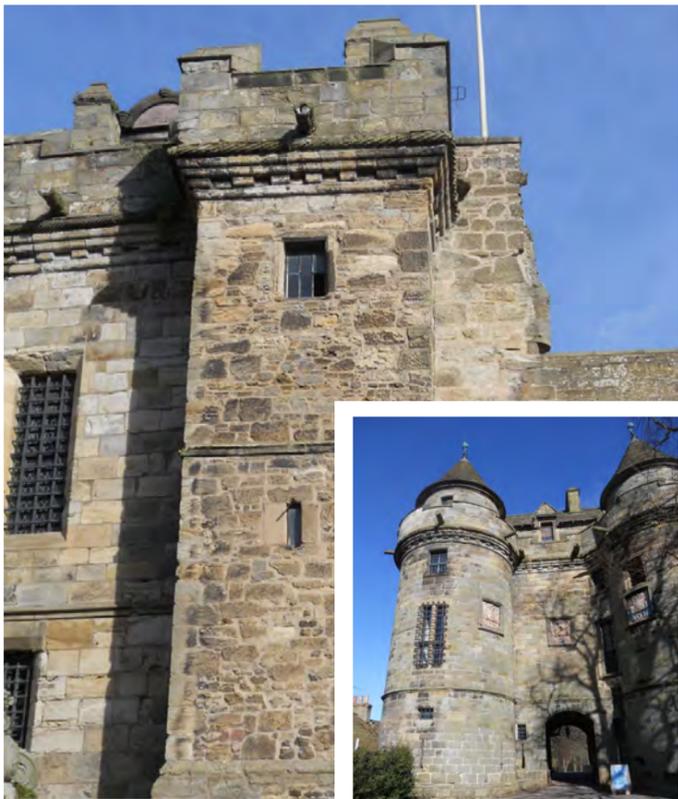
Re-connecting people
with the hills

Historic Landscape



1. Falkland Palace, East Port

This stair tower (c.1511-1513) is made up of rubble and irregular blocks of sandstone probably collected from nearby fields or broken off quarry faces without further treatment. This is in direct contrast to the Chapel building to the left which has cut blocks (ashlar).



The Gatehouse at the west end of the palace (c. 1539-1541) shows a more precise form of building, using ashlar blocks, that is, stone which has been cut to size into rectangular blocks and which are easier to cement together, in horizontal courses.

There are records that sandstone used in building the palace came from Kingoodie Quarry (Dundee), because it was part of the Crown Estates at that time.



2. Maspie House, East Port

This building, formerly the Post Office and now an art gallery, is made of cream-coloured sandstone cut into ashlar (sawn) blocks. It dates from 1819, before the advent of railways, so the stone would have been brought by horse and cart. The stone has a distinctive black weathering surface.



3. Bank of Scotland, High Street

The British Linen Bank was formed in 1746 and existed until 1971 when it was amalgamated into the Bank of Scotland. This building was built in 1880. The yellow hue to the stone suggests it is not local and could have been brought from afar by railway.



4. The Weaving House, Back Wynd

This building, a rear extension to the bank, used to be the Town Clerk's house. It was built in 1900 as seen in the stone carving located under the chimney stack. The ashlar sandstone blocks are an indication of more modern building methods.



Ashlar sandstone blocks

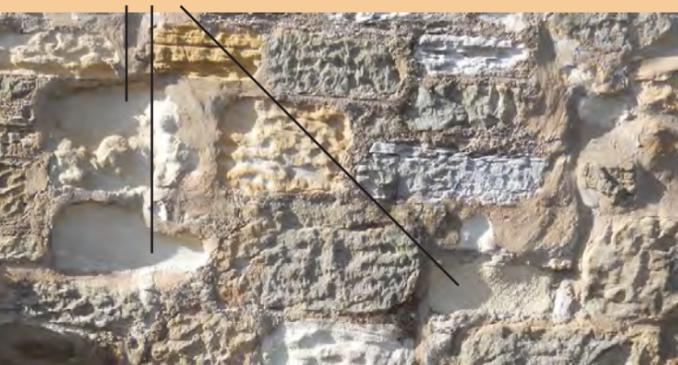


"CG 1900" carving refers to Charles Gulland, Town Clerk of Falkland, whose father was Town Clerk before him.

5. Hayloft Tearoom, Back Wynd

This is a good example of a rubble wall made mostly of sandstone, but the lowest course (foundation) is made of large whinstone boulders. Some sandstone is badly eroded suggesting it has calcite (calcium carbonate) cementing the sand grains. Calcite is easily dissolved by acid rain.

Corroded Sandstone



Wall on the right hand side of the entrance

6. Weavers Cottage, Back Wynd/ Horsemarket corner

This rubble wall comprises a mixture of sandstone, basalt and dolerite. The dolerite weathers to a dull brownish-green colour, whereas basalt remains black. A few cut blocks of sandstone may have been recycled from a pre-existing building. Note that the mortar contains small white fragments of sea shells, suggesting the sand came from a beach.

This house (c. 1700) retains an external forestairs on the Horsemarket frontage.

Basalt Dolerite Cut Sandstone



7. Cottage Craft Centre, Sharp's Close

From the entrance to the Craft Centre walk 8 metres (yards) to its left, up the cobbled lane just before you reach a small window painted white.

These are 18th C cottages. The walls are mostly cut sandstone, with two small pieces of black basalt used as packing material.

Basalt



Sharp's Close is paved with angular and rounded cobbles, probably derived from local fields. The image below shows the dark nature of the rock which is made of basalt.



8. Gift Shop, High Street

This is an example of a house built almost entirely of whinstone (dolerite). The white painted quoins may be made of sandstone. More unusual is the fact that the whinstone has been cut, given that whinstone is harder to cut than sandstone. In contrast, the side of the house next to the alleyway is made of sandstone.



A detail of the cut whinstone blocks

Return to your starting point, or take some time to explore the local shops, restaurants or coffee shops.