Using maps to investigate Scotland’s rural past

Detailed maps of Scotland have been created from the 16th century onwards and are a fantastic resource for charting the many changes that have taken place in the countryside, showing the rise and fall of particular places, regions and features through time. By comparing maps printed at different times we can find out a lot of clues to help us build a picture of how people lived in the past. We can find out where they built their houses, where they grew their crops and where they grazed and housed their animals. Maps show us the size of the communities they lived in and the sorts of environmental conditions they had to survive in.

When investigating a rural settlement site archaeologists will study a range of historic and modern maps to see if they can identify what the site looked like in the past, and observe how a landscape developed over time and record how settlements grew, changed and eventually became abandoned.

The following maps showing Rosal have been used in this case study, along with suggested discussion ideas of how to use them. The maps cover a time period of about 130 years and show how different mapmakers have depicted the site.

- Roy Map 1747 – 1755 (see http://geo.nls.uk/roy-highlands/)
- Heights of Strath Naver Map – 1811
- Ordnance Survey 1st edition – Sutherland 1878, sheet xiiv

Locating Rosal

Use an Ordnance Survey map to locate the settlement of Rosal. Its national grid reference is NC689416.

You can find Rosal on the Ordnance Survey Landranger Map, sheet 10 Strath Naver / Srath Nabhair Scale 1:50 000, and on the Ordnance Survey Explorer Map, sheet 448 Strath Naver & Loch Loyal / Srath Nabhair (& Loch Loyal) Scale 1:25 000

or use the following online resources:
http://getamap.ordnancesurvey.co.uk. This allows you to input the national grid reference to see a 1:25000 scale map of the site
Google maps: http://maps.google.co.uk
Google Earth: http://earth.google.com
Live Local: http://maps.live.com/
Multimap: www.multimap.com

Look at a modern map
- Talk about the kind of landscape the site is located in today. Has it always looked as it does now?
  - Rosal is today surrounded by forestry, which was planted by the Forestry Commission in the 1960s. Prior to this the site was surrounded by moorland.
- Try to find the nearest modern settlement.
  - The nearest town is Bettyhill on the north Sutherland coast, but there are small settlements all along Strath Naver. In the past there were numerous townships throughout the strath on either side of the River Naver.
Roy Map

The Roy Map was surveyed between 1747 and 1755 at an approximate scale of one inch to 1000 yards (or about 1:36,000). It is a military map drawn shortly after the Battle of Culloden and was created by the British army to depict the landscape, roads and settlements of Scotland. Many now abandoned rural settlements are depicted on it, along with details of the cultivated land associated with each settlement.

You should have already located Rosal on a modern map. Now try to find Rosal using the National Library of Scotland’s Roy Map website http://www.nls.uk/maps/roy/index.html. To open up the map browser click on ‘Full Screen map – Highlands’.

A copy of the Roy Map showing Rosal (Roy Map 36/3a Area around Upper Strath Naver) is also available on the SCRAM website http://www.scran.ac.uk.

Rosal is in the far north of Scotland at the southernmost end of Strath Naver. In the Roy Map it is depicted as ‘Rossell’ and can be found beneath the ‘N’ of Strath Naver.

Examples of how to use this resource

Use the Roy Map to study the site and make observations about the settlement at Rosal, the surrounding landscape and the people who lived there.

The following key to colours in the Roy map will help you to decipher it:

- red is used to show buildings and man-made structures
- brown is used to show roads
- blue-green is used to show water
- green is used to show woodland
- yellow is used to show cultivated ground
- buff is used to show moorland

The following questions provide ideas for discussion with your class.

- Why do you think the Roy Map was created?
  - The Roy Map was drawn by the British Army shortly after the Jacobite Rebellion. It would have been a vital reference in case any further trouble broke out in Scotland. It shows many features which would be of interest to an army commander needing to plan a battle or move troops around the country. Features such as roads, rivers, the positions of villages and hamlets, as well as different types of land-cover and terrain are shown in detail.

- Can you describe how Rosal is depicted?
  - Rosal is shown as a group of six red buildings on the sloping ground above the River Naver. The township’s cultivated fields are depicted in yellow as irregular and overlapping shapes on the hillside’s flatter lower slopes to the south and east of the settlement. The dashed lines within the fields represent where the land had been ploughed. Rosal is virtually surrounded by moorland, except on its northern side where there is a woodland. There are many similar townships nearby.

- Why do you think Rosal spelt ‘Rossell’?
  - The mapmakers did not understand Gaelic and so they spelt name of the township phonetically.
• What can we say about the township from this map?
  o From the cultivated fields we can see that in the mid-18th century Rosal was still occupied by a farming community who grew their crops in fields nearby. It was built on the higher ground above the river to prevent it from being flooded. Many of the essentials for daily life in the township would have been available in the landscape around them – food from the fields, water from the river and wood from the woodland. The hillsides would provide grazing for their animals and peat for their fires. The Rosal people would have had neighbours and perhaps family in the townships close by and could use the road running along the strath to travel North to the coast, or South to Loch Naver.

• Do you think the Roy Map a reliable historic source?
  o The Roy Map isn’t as accurate as the Ordnance Survey maps we have today. It gives an overall impression of what the landscape and settlements were like rather than show them in measured detail. For example, we know from archaeological evidence that there were considerably more than six buildings at Rosal, and they are not all in one group. However, the map would have been fit for its original military purpose.
Rosal Township as depicted on Roy Map
36/3a Area around Upper Strathnaver
Heights of Strath Naver Map

The Heights of Strath Naver map was drawn in 1811, prior to the Clearances, at a scale of approximately six inches to one mile. It is an example of an estate map, and was probably made for the landowner, the Duchess of Sutherland, to plan and prepare for the introduction of sheep farming in Strath Naver. The map shows the layout of the township at the time and the area of arable and pasture land. Once again the name of the township is misspelled, this time as ‘Rosshill’.

Examples of how to use this resource

Use the Heights of Strath Naver map to study the site and compare it with the Roy map. The following questions give you some ideas for discussion with your class.

- **How does this map differ from the Roy Map?**
  - This map is more detailed, showing the relative positions of buildings within the township. The mapmaker has also drawn the shape of the farmland more accurately and shown the difference between the arable and pasture land.

- **How many buildings are shown on this map?**
  - There are 22 buildings drawn on the map. They have been drawn as small rectangles, some with yards attached, some L-shaped and all varying in size.

- **What do you think the buildings were?**
  - The L-shaped buildings, the yards and the arable land indicate a farming settlement.

- **What can you observe about the positioning of the buildings within the township?**
  - The buildings are positioned close to the periphery of the township, avoiding the land in the centre.

- **Does Rosal look like a modern town on this map?**
  - The buildings seem to be scattered all over the place and are not planned in any kind of regular order, unlike towns today.

- **Why has the land within the township been drawn in two different styles?**
  - The mapmaker has depicted two different kinds of land use within Rosal. Arable land (for growing crops) has been shaded in a darker, lined tone. Pasture (for growing grass) is shown in a lighter shade.

- **What is the area of pasture and arable land within the township?**
  - The land was measured in Scots acres, roods and falls. The township is made up of 39 Scots acres and 1 rood of arable, and 25 Scots acres and 2 roods of pasture.

- **What is the ratio of arable to pasture land?**
  - The ratio is approximately 8:5, 8 parts arable to 5 parts pasture.

- **Why would the mapmaker show the totals for pasture and arable land?**
  - The acreage has been shown for the benefit of the landowners so they can calculate how much rent the people in Rosal should pay them. The landowner rented the land to a tacksman, who would himself rent it to sub-tenants and landless cottars. The tacksman would be responsible for gathering the rent from the others and paying it to the landlord.
• How many people do you think lived here?
  o In 1815, it was estimated that 13 families lived in Rosal. Families were usually far larger than today, with around five or six children in each family. Discuss why families were so large.

• Why are there more buildings than families?
  o Not every building within the township was a dwelling, there were also farm buildings.

• What can you see surrounding the township?
  o There is a dyke enclosing the township, shown as a solid line, separating its farmland from the moorland on the hill. There are also smaller pockets of enclosed pasture near the river.

• What did farmers do with the animals when the fields were in crop?
  o When crops were growing in the township's fields, the animals would need to graze elsewhere. This would need to be outside the enclosing dyke; even the pasture within the township might be needed for hay, so that the animals could be fed during the winter. During the summer the cattle were taken to the shieling grounds in the hills. Here the cattle would forage and graze on the hillside vegetation.

• Is this an accurate plan?
  o If you compare the 1811 map with later maps and photographs you can easily see the similarities in the shape and layout of the settlement. It made good sense for landowners to map their estates accurately in order for them to calculate their rents, or make plans for changes to their estate, such as introducing large-scale sheep farming.

• Is this a reliable historic source?
  o Such an accurate and measured portrayal is vital evidence for archaeologists and historians who want to find out about rural settlements. Because the map was drawn up for the estate it is valuable first-hand evidence of life in Rosal in 1811.

Further ideas

Below is a transcription of the 'table of contents' from the Heights of Strath Naver map of 1811. It lists the total amount of land at Rosal, within and outside of the township. These figures may have been drawn up as the Sutherland Estate made its plans to introduce sheep farming in the early 19th century.

<table>
<thead>
<tr>
<th></th>
<th>Arable land</th>
<th>Grass</th>
<th>Shielings</th>
<th>Moss pasture</th>
<th>Hill Grazing</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>A R F</td>
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<tr>
<td>Rosshill</td>
<td>Small tenants</td>
<td>46 1 35</td>
<td>34 3 4</td>
<td>6 1 36</td>
<td>703 3 10</td>
<td>4140 - 29</td>
</tr>
</tbody>
</table>

Measurements are in Scots acres, roods and falls:

1 Scots Acre = 4 roods = 5000 square metres or 0.5 hectares (approx)
1 Rood = 40 falls = 1270 square metres (approx)
1 Fall = 32 square metres (approx)
• Calculate the area of land at Rosal using the figures above to convert from Scots measurements to metric.
• Find out why the people in Rosal would have needed each of these parcels of land.
• Identify, classify and measure or estimate the different kinds of “land uses” found on your school grounds, for example - playground, grassed areas, car park, and playing field.
Ordnance Survey 1st Edition Map– Sutherland 1878, sheet xliv

The Ordnance Survey began mapping Scotland in 1843, at a scale of six inches to one mile. These maps are called the first edition Ordnance Survey maps. They are useful for tracing deserted rural settlements because they span a period when many old townships and farmsteads were abandoned.

The six-inch scale is large enough to show individual buildings and the maps distinguish between those which are roofed and those which are not: roofed buildings are shaded in dark ink and unroofed buildings shown in outline only. The unroofed buildings generally indicate houses and outbuildings that were recently deserted at the time of survey. Very decayed buildings were sometimes depicted as ‘Ruins’, or not shown at all.

Use the Ordnance Survey 1st edition map to study the site and compare it with the earlier maps. The following questions give ideas for discussion with your class.

Examples of how to use this resource

- How many buildings are shown on this map?
  - There are nine buildings shown on the Ordnance Survey 1st edition map.

- Are the buildings roofed or unroofed?
  - Each building has been drawn as an unshaded rectangle, which is the symbol for an unroofed building.

- Why have these buildings lost their roofs?
  - The buildings have lost their roofs because sometime between 1811 and 1878 the people who once lived in them abandoned them. Without anybody to live in them and repair them they soon decay and lose their roofs.

- Where have all the other buildings gone?
  - The mapmakers only drew the remains of buildings which survived above a certain height. Anything less than 1 foot in height was not surveyed and drawn. The mapmakers were not archaeologists wanting to record ruined buildings, so they only drew a few of the buildings in Rosal to give a flavour of the site. Also, they could only survey what they could see – perhaps the site was covered in bracken when they went there.

- Where did the Rosal people go?
  - Historical records show that the people in Rosal were cleared from the township between 1814 and 1818 by Patrick Sellar, the factor of the Sutherland Estate. They were cleared to make way for a sheep farm in Strath Naver which was leased to Patrick Sellar. The townspeople were allocated crofts on the coast, however these provided insufficient land to support a family. Further information can be found in the New Statistical Account for Farr Parish: http://stat-acc-scot.edina.ac.uk/link/1834-45/Sutherland/Farr
Further ideas

- Use the National Library of Scotland’s maps website to find Rosal on two other historic maps
  - Pont [http://www.nls.uk/pont/general.html](http://www.nls.uk/pont/general.html)
  - Blaeu [http://www.nls.uk/maps/early/blaeu/blaeu_graphic_index_scotland.html](http://www.nls.uk/maps/early/blaeu/blaeu_graphic_index_scotland.html)

- Use [http://www.oldmaps.co.uk](http://www.oldmaps.co.uk) to see what the area around your school looked like in the past.

- Draw a map of your school and surrounding area as it looks now, and as you think it might look in 250 years time. Design an appropriate key to go with the maps.

- Create a timeline to show the main historical events during the 250 years covered by these maps.

- To put the changes to the maps in their historical context, find out more about the role played by the Duke and Duchess of Sutherland and Patrick Sellar during the Sutherland Clearances. Use Am Baile to search for resources [http://www.ambaile.org.uk](http://www.ambaile.org.uk).