Activity Sheets:  
Step by Step: Industrial Case Study

Analysing changes in features and landscapes:

This activity will guide you through the process of map regression for an industrial location. Map regression is the study of a sequence of maps to reveal changes in individual features and the landscapes you can find them in. It’s a useful way for archaeologists to study changes in the landscape – maps can act as a historical record and can help provide information on potential archaeological sites.

Maps not only show these landscape changes and possibly when these changes happened, they can also show what features are important to map makers at that time. For example, Thomson’s 1832 map focuses on the main features and places of importance for an area, whereas the Ordnance Survey maps give a lot of detail on individual field boundaries. Both of these aspects of the maps are associated with historical events at that time.

One thing you need to try and remember is who created the map. A map maker will have a purpose for producing that particular map and it’s important that you understand why the map is being made and who the main audience was.

Sometimes a map maker will not show a feature because it’s not important to the map’s purpose. For example, if a map is being made to show safe harbour areas, upland agricultural areas are not relevant. However, even though the upland agricultural areas aren’t shown on the map doesn’t mean they didn’t exist!

In this activity, you will also learn how to choose the right information from historic maps which are relevant to what you’re researching and how to record and present your findings. To guide you through the process of map regression there are three case studies:

- rural (online)
- urban (PDF)
- industrial (PDF)

Work through the industrial case study on the following pages.
Before you start looking at historical maps, it’s a good idea to identify what information you need to find out. You should start by answering these questions: Why are you looking at these maps? What question is it that you want to answer?

Starting with a question will help you stay focused while looking at a series of historic maps and it will help you identify what features of the map you need to pay attention to. Your question could be ‘when did Morrisons Harbour go out of use?’ or perhaps you even want to start with a more general question, like ‘how has this landscape changed within the last 200 years?’

**Step 1: What question do you want to answer?**

After a school visit to Prestongrange Industrial Museum, pupils from a local school would like to find out more about Morrisons Haven Harbour (Site 1 on the map) and its association with Prestongrange Colliery (now Prestongrange Industrial Museum). Although the Harbour has now been filled in, the pupils know that it was once an important feature in this local area.

The pupils want to answer

- How has Morrison’s Haven Harbour changed over time?
Although it might be interesting to find out as much as possible about your local area, it will be easier to answer your main question by setting what is called a study area boundary.

Your study area boundary should include the features you are interested in and some useful landmark points such as buildings, prominent natural features, or place names. Although we have used a historical map here, you might find it easier starting with a modern map on which you can trace your study area boundary.

Case Study - Prestongrange Industrial Museum

For their study area, the pupils have chosen to include the extent of what was the Prestongrange Colliery (as well as the harbour area) as it will help answer their main question (see step one) and perhaps give further information on why the harbour may have gone out of use. The study area will have them work out what maps they need.
Identify two to three fixed landscape reference points which will help pinpoint your location as you make your way through the historical maps. Be careful not to pick obvious reference points though! For example, a supermarket from the 1990s is not going to be found on the same spot in the 1850s!

It’s also important to have consistent reference points because maps can be so different that sometimes it’s easy to get lost within one map sheet! Historical maps can often show different scales or use different symbols to show the same feature so using a place name or a burn can sometimes help you accurately identify your study area. Choose reference points that have not changed very much over time.

Case Study - Prestongrange Industrial Museum

Having visited the site, the pupils know that the harbour is still visible and therefore they suspect that the harbour has not changed over time. They also know that the road still survives within the museum area. Therefore, as their fixed reference point, the pupils choose the road and the harbour wall.
Step 4: Select the maps which will tell you what you need to know?

Go back to your original question and think about which map sources will help you. Consider the scale of the map (is it detailed enough?), the date of the map (will the features appear on an early map?) why are they producing the map? And finally the source of the map (will a naval chart tell you about a land-based limekiln?)

Look at the choice of 4 maps over the next two pages which show your study area – not all of them are going to be useful. You might want to narrow down your list of maps to those that will be the most help in answering your original question.

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Case Study - Prestongrange
Industrial Museum

The pupils are keen to know that the features they are interested in (identified in Step 1) but now need to identify which maps will reveal the information they need. As Morrison Haven is on the coast they have included coastal. Therefore they have chosen four maps which they think will help.

- Map 1 – Collins Greenville 1669-1698, Edinburgh Firth - The pupils pick this coastal chart so that they can look at an early map depicting their area
- Map 2 – Thomson 1832 – This map dates to the early 19th century and depicts the harbour
- Map 3 – Ordnance Survey 1st Edition map – one of the first detailed maps available of the area
- Map 4 – Ordnance Survey 1944 – this map shows the gradual decline of the harbour area
Now that you have selected your maps, you can look at them one by one and start identifying any landscape changes. Think about the skills you learned in other areas of this resource and use them here to help you. What changes can you identify between the different maps and how can they answer your original question? What features are shown, what features are no longer shown? Why might a feature no longer be there? Was it built-over by another feature or was it no longer important?

### Case Study - Prestongrange Industrial Museum

<table>
<thead>
<tr>
<th>Site</th>
<th>Map 1 Collins Greenville 1669-1698</th>
<th>Map 2 Thomson 1832</th>
<th>Map 3 Ordnance Survey 1st map (1895)</th>
<th>Map 4 Ordnance Survey 1944</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morrisons Haven</td>
<td>The harbour wall is shown but it looks different to how it looks today. This suggests that the harbour was rebuilt at some point between the 17th and 19th Century.</td>
<td>The Harbour is shown and named. It looks very similar to what survives today. The pupils notice that a flint mill is depicted nearby and is likely to be linked to the local pottery industry.</td>
<td>The pupils notice a railtrack leading from the harbour to the Prestongrange Brick and Fire Clay works. This suggests the harbour was used to import/export materials required for the production of bricks or tiles.</td>
<td>This map shows that the majority of the harbour is now silted up which suggests it is no longer in use. The Brick and Tile works appears to have been replaced with the Prestongrange Colliery.</td>
</tr>
</tbody>
</table>
Step 6: Recording your map regression and gathering your results

To continue your understanding of map regression, it’s important that you make a thorough and accurate record of your work. This will save you time later on!

You might find it helpful to create a gazetteer, or list of the changes you have seen for each feature on the map you are interested in. Remember to always keep a detailed record of the map reference so you can refer back to it at any point. Important things to record include:

- The title of map
- The author of the map
- Scale of the map
- The date the map was surveyed
- The date of publication

Here are some suggested ways to reference your map

*John Thomson, Northern Part of Argyllshire, 2¾ inches to the mile, ca. 1:170,000, published 1824.*

*Ordnance Survey, Argyllshire XV, 6 inch to the mile (1:10,560), surveyed 1782, published 1875.*

You might just be looking at your study area for fun so you may not be looking to produce a report of your map regression, but if you are, think about how you might reference the maps within your text.

It’s important to be consistent in your descriptions, to be accurate with dates and provide detailed but clear descriptions of the landscape changes. Think about how someone who might read your research at a later stage will interpret your work.
Case Study - Prestongrange Industrial Museum

The pupils have now finished their map regression exercise. With the site being in an urban area, the pupils found that there was good map coverage of their site.

They identified that the Morrison’s Haven Harbour existed in the 17th Century by looking at an early coastal chart but they also realised that the harbour has been rebuilt at some point.

The existence of the flint mill (on Thomson’s 1832 map) suggests that Morrison’s Haven was part of the pottery industry which existed in this area in the 19th century. The Ordnance Survey maps were able to give detail on the harbours associated with the Prestongrange Tile and Brick works and later, the colliery.

The pupils will now look at further information (such as aerial photography and historical records) to enhance the data they have collected from the map regression. See the ‘Go further’ section for some of the resources the pupils went on to look at.