Teacher Resource Pack
Investigating Your Local Mining Area

Contents:
1. Introduction
2. Your Mining Area – Overview
2. Colliery Examples
3. How to investigate your local area
4. Our Mining Area – Activities
5. Further Resources & Contact Information
**Introduction**

**National Mining Museum Scotland (NMMS) offers A Mine of Information for pupils of all ages. We aim to creatively inspire interdisciplinary learning and support teachers through the provision of dynamic resources and tailored activities designed around the Curriculum for Excellence experiences and outcomes.**

This resource pack has been created by National Mining Museum Scotland (NMMS) for educational use. The study of your local area and its mining history is a great way to take pupils on an unforgettable learning journey which can take place in the classroom and outdoors.

The story of coal is multifaceted, enabling learners to engage with their local community as well as the Curriculum for Excellence experiences and outcomes for Social Studies, STEM, Expressive Arts, Health and Wellbeing and Literacy.

With one topic you will cover decades of history. The study of mining in Scotland takes us from as early as the 12th century, through the Industrial Revolution and the Victorian era, nationalisation in 1947, the end of an industry in the 1980s to present day and renewable energy.

Investigating your local area is a great interdisciplinary topic and we are here to help! NMMS has a collection of over 25,000 photographs, maps and objects in our Recognised Collection.

The following Resource Pack has been designed as an introductory resource to mining history in your area and provides information, resources and suggested activities for your class.

Needing more information or support? Please see our Further Resources & Contact section to learn about class visits to the museum, outreach workshops and who to contact about your project.

“**This resource really helped me refine what we would cover in our project. When we started most pupils didn’t know that there was a coal mine in town and had no engagement with the history on their doorstep…. This project has been great – pupils were eager to find out more and the mix between in the classroom and out of the classroom activities was perfect.”** Teacher, Midlothian.
Midlothian’s Mining Past

Midlothian was the fourth most important coal mining area in Scotland after Fife, Lanarkshire and Ayrshire. Midlothian contained 26 collieries and peaked in 1957 with around 11,000 miners being employed across Midlothian’s collieries.

Midlothian has a long history of coal mining stretching back to the 12th century with the earliest extractions by the monks from Newbattle Abbey. During the Victorian era, Midlothian’s coal industry rapidly expanded and the first Victorian “superpit” was built – The Lady Victoria Colliery (1895-1981). In 1842, a Royal Commission produced a report into the working conditions of miners which led to the 1842 Mines Act that banned women and girls from working underground and regulated the age boys could start working underground. Within this Report, also referred to as the Children’s Employment Commission, we find first-hand accounts and sketches showing the working conditions miners of all ages faced. Please see our information sheet on the NMMS website for more information about the Report or, alternatively, the Report itself is available online or from the NMMS Library. Below is an extract from the Report for Arniston Colliery:

**No.87 Andrew Young, 11 years of age, coal-puter:**

…..We draws as the horses do, only we have no wheels to the slypes, therefore the work is very sore. Boys frequently fall under the slypes and get much injured…. We work from four in the morning till five and six at night and when on night-work we yoke at four afternoon and return six and seven next morning; we get nothing below but a piece of oatcake: it is not customary to take flesh or beer. I go to night-school for one of two hours: can read and doing something at writing.

Midlothian has several historically important Collieries, photographs and further information of these will be given in the “Colliery Examples” section, however, Midlothian is also associated with one of Scotland’s worst mining disasters at Mauricewood, near Penicuik. The Mauricewood disaster claimed the lives of 63 miners in an underground fire on 5th September 1889.

In 1947, there were 20 collieries in Midlothian which were taken into state ownership and six new mines sunk by the NCB. Of these, four were relatively small short-lived surface drifts at Oxenford 3, Cowdenfoot, Castle and Harwood, but two were the prestigious superpits at Bilston Glen and Monktonhall.

**What is a “superpit”?**

Superpits were often referred to as “new sinkings”. New sinkings was a term used to describe the new coal mines sunk by the NCB following nationalisation, their surface structures were mostly designed by the NCB’s Scottish Area architect, Egon Riss. Rothes (Fife) and Glenochil (Clackmannanshire) were seen as spectacular failures but others such as Killoch (Ayrshire), Seafield (Fife) and Monktonhall and Bilston Glen (Midlothian) were seen as successful.

In 1984-5 Midlothian witnessed some of the bitterest scenes in the miners’ strike and Bilston Glen, in particular, became the focus of sustained unrest. Monktonhall was also
notable as it survived the privatisation of the industry in 1994, being rescued by a miners’ co-operative buyout which generated great public sympathy.

In Midlothian’s heyday, its coalfield produced a wide range of coal including gas, house, steam and manufacturing coals. In addition, fireclay, blaes and ironstone were produced in significant quantities by some pits. Prior to 1947, the most important companies included the Lothian Coal Company, the Shotts Iron Company and the Niddrie and Benhar Coal Company.

<table>
<thead>
<tr>
<th>Colliery</th>
<th>Manpower at peak (est.)</th>
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<tbody>
<tr>
<td>Bilston Glen</td>
<td>2150</td>
</tr>
<tr>
<td>Monktonhall</td>
<td>1600</td>
</tr>
<tr>
<td>Lady Victoria Colliery</td>
<td>1340</td>
</tr>
<tr>
<td>Arniston</td>
<td>1000</td>
</tr>
<tr>
<td>Woolmet</td>
<td>850</td>
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<tr>
<td>Easthouses</td>
<td>800</td>
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<tr>
<td>Burghlee</td>
<td>&gt;750</td>
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<tr>
<td>Newcraighall</td>
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<tr>
<td>Roslin</td>
<td>&gt;750</td>
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<tr>
<td>Lingerwood</td>
<td>700</td>
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<tr>
<td>Dalkeith</td>
<td>600</td>
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<tr>
<td>Carberry</td>
<td>550</td>
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<tr>
<td>Whitehill</td>
<td>550</td>
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Information from “Scottish Collieries” by Miles Oglethorpe, 2006

The early years of nationalisation saw Midlothian’s mining industry prosper however, by 1960 decline set in. This was slightly offset by the opening of Bilston Glen in 1963 and Monktonhall in 1967. Ten years later, only these two superpits survived but with a combined workforce of only 1500 miners. Bilston Glen closed in 1989 and Monktonhall in 1997. Both sites were demolished shortly after closure.

Even though there is no mining in Midlothian anymore it remains a hugely significant county. This is largely due to the survival of the Lady Victoria Colliery, a Victorian superpit, which is home to the National Mining Museum Scotland. The below map shows the location of NCB collieries in Midlothian.
NMMS has a fantastic wealth of resources in our Recognised Collection and Research Library including photographs, historic maps, objects and information.

Let us know if you are looking at a specific colliery/area and we would be happy to provide further information or larger photographs for you to use with your pupils. While our collection relates to mining, many of our images are great examples of the development of technology as well as the changing social and domestic conditions in mining communities.

Below are a series of example photographs from a selection Midlothian’s collieries.

**Arniston Colliery** (Gorebridge – 1850-1962)
Explosion at Arniston Colliery (above)

Damage to miner’s cottages due to explosion (right)

Tipper lorry from Arniston Colliery – Arniston Coal Co.
Bilston Glen (Bilston Glen/Loanhead - 1963-1989)

Winding Engine at Bilston Glen

Christmas Card – Bilston Glen

Gala Day 1984
Underground Loco at Bilston Glen

Miner at Bilston Glen

Secondary School Pupils visiting Bilston Glen late 1980s
The Lady Victoria Colliery *(Newtongrange, 1895-1981)*

**Pit Bottom, Lady Victoria Colliery**

**A young Victorian miner**

**NCB miners at Lady Victoria Colliery**
Wullie Douglas (miner) returning his cap lamp at the Lady Victoria Colliery

Scouts visiting the Lady Victoria Colliery

Two young pony drivers at the Lady Victoria Colliery
How to investigate your local area

Studying your local area is a great way to meet Curriculum for Excellence experiences and outcomes as well as contextualise learning for pupils in an active and holistic manner. While this topic can be studied in the classroom we believe that to enhance the learning experience pupil’s need to explore their local area. Outdoor learning doesn’t need to take place in a green space or as a residential but can be accomplished using the resources on your doorstep.

Background

For any topic it’s vital to know your background information. NMMS is happy to provide information, photographs and, where possible, handling objects. Did you know we have a research library? This is free to access as well.

Searching the internet will offer a huge amount of information on your local area however, for reliable sources and detailed information we recommend the following:

1. Websites:
   a. Scottish Mining Website
   b. SCRAM
   d. Scottish Centre for Victorian Studies
   e. BBC Schools
   f. UK Census Collection
   g. Archaeology Scotland
   h. The Statistical Accounts of Scotland 1791-1845
   i. National Records of Scotland
   j. National Archives of Scotland
   k. Outdoor Journeys (University of Edinburgh)

2. Books:
   a. “Scottish Collieries” by Miles K Oglethorpe
   b. “You Wouldn’t Want to be A Victorian Miner” by John Malam & David Antram
   c. Any book by Guthrie Hutton

3. Local research:
   a. Contact your local authority or library
   b. Contact your local museum
   c. Contact any local history groups or see the HLF website for any cultural projects taking place in your local area

There is a huge wealth of materials available and we are happy to provide materials or even help by suggesting websites or reference books.
Your Local Colliery
Once you have discovered your local colliery it’s time to investigate. Information can be gathered using the above sources or contact NMMS for photographs and maps! The majority of Collieries were demolished after their closure however, there may still be buildings or clues to be discovered.

Using historical maps is a perfect way to uncover exactly where your local coalmine was. Digimap or National Library of Scotland Map Service (online platforms) both offer the ability to select an area on a modern map and compare this with historical maps. Please see the example below from National Library of Scotland:

![Historical Map Example](image)

Activity tip: this is a great exercise to do with your class! Using the functions pupils can discover the year the colliery was built and look at the development of their town, what’s changed/what hasn’t. Digimap’s has been developed for use by schools and allows pupils to add information and photographs to their map or there is a step by step guide to Map Regression here - http://digital.nls.uk/mapping-history/

Once you have selected your local colliery, you can then visit the site or search using NMMS, Scottish Mining or Canmore/Scran to identify what remains of the colliery. In many instances the buildings may have been repurposed or demolished completely. No matter the condition of the site evidence may still remain for any of the following:

1. Mining housing/cottages – do the names of the streets provide clues?
2. Industrial structures/buildings/wheels or related industries
3. Transport links such as train tracks, roads or canals
4. Bing (a bing is essentially a waste heap from a mine)
5. Mining tributes or memorials
6. Surviving social clubs – Mining Welfare clubs, sports clubs, etc.
Our Mining Area – Activities

In this section we have provided a series of classroom and outdoor activities all tried and tested by learning professionals. All activities are cross-curricular but are strongly situated with Social Studies and Health and Wellbeing experiences and outcomes.

Our method follows Dr Simon Beames, University of Edinburgh, Outdoor Journey’s approach – questioning, researching, sharing.

Did you know that this type of project would qualify your pupils for a Heritage Hero Award from Archaeology Scotland? Please see the NMMS or Archaeology Scotland website for more information.

Questioning

Activity 1: Map Regression

Map Regression is the study of a sequence of maps to reveal changes in individual features and the landscapes you can find them in.

A step by step free guide to reading historical maps, how to compare and contrast and how to accomplish map regression is detailed in National Library of Scotland’s website – Mapping History. Please see website - http://digital.nls.uk/mapping-history/ or see the Industrial Case Study on the NMMS website.

This exercise can be done with pupils digitally or using physical maps.

Activity 2: Senses Map

Senses Map (sometimes referred to as a Community Map) is a fun twist on map drawing. Pupils discuss their local area – what are the key buildings, places, green areas, roads, etc. What is important to one pupil might be different for another pupil. On their map pupils should use colours and images to mark down areas in their town that have other meanings to them. For example – green wavy lines could mark a smelly alley, a skateboard could mark where they like to play, red could mark an area they don’t go to or don’t like, etc. This is a great youth-led activity and can be as detailed or not depending on what pupil’s choose.

Activity 3: Historical Photographs

Using historical photographs is a fantastic way to develop enquiry and investigative skills as well as link to further activities.

Select your historical photographs and follow these three stages:

1. Observe and note details – what do pupils see in the photograph? What did they notice first? What is the physical setting? What objects are present? Is it an old photograph – how can they tell?

2. Reflection and comparison – why was the photograph taken? Who are the people? Why are they dressed that way – do we dress like this today? Where are they – does this place exist? What can you learn from the image? What is the same as today and what is different?
3. Question – what more do you want to learn? Where could you find that information from?

From this activity you can create photograph captions, pupils can do predictions of what happened next or recreate your own historical photographs.

**STEM link** – look at the development of photographic technology and create pinhole cameras.

**Activity 4: Coal Mining**

Explore the history of coal mining in Scotland. From what is coal, what it was used for, the Industrial Revolution to nationalisation and more “modern” mining – this is a great cross-curricular topic.

NMMS offer guided tours by ex-miners, introduction to mining workshops in the museum or in your classroom or why not borrow one of our loan boxes? Further information on all of these is at the end of this pack.

**Activity 5: Inter-generational project**

Stories from local people about their mining memories is a great way for pupils to learn first-hand what life was like underground. Parents/grandparents, local history groups or Parent Council’s are a great way to find someone who would be willing to speak to your class.

**Activity 6: Miner’s Old & New**

Create your own classroom miners! This will enable pupils to visually compare and contrast a Victorian miner to a NCB (post 1947) miner.

Draw 2 outlines of a person/pupil on a large sheet of paper (try using wallpaper or lining paper – many DIY stores have off cuts they would be willing to donate). Then decorate one outline as a Victorian miner and one as an NCB miner. *Large copies available from NMMS.*
Researching

The “researching” activities listed all take place outdoors. There are many resources available to assist you in preparing for outdoor activities from Outdoor Journeys, Woodland Trust Scotland Outdoor Learning Pack, OWL Scotland and Creative Star Learning.

Activity 1: History Detectives

Investigate the buildings, homes, street names and any colliery related buildings or structures by walking around your town or specific location. Pupils can record what they discover by listing details such as building materials, height, shape, condition, etc., and plotting where they found these structures on a map. Alternatively, pupils can draw or photograph what they discover.

To guide pupils why not create a treasure hunt? Either using clues or pictures pupils have to search to find the object/building/structure and record what it is and where it is.

This exploration links with health and wellbeing, social studies, maths, art and literacy experiences and outcomes.

Activity 2: Drawings

For investigating your local colliery building/structure charcoal drawings or rubbings of materials can be done either outside or back in the classroom.

Activity 3: Bings and Green Spaces

Many collieries and bings are now green spaces. These spaces are great for observing and recording plants, insects and animals.

Why not create “wildart” – use plants to discuss 2D and 3D, draw using the shadow of plants, create plant collages, etc.

Sharing

Activity 1. Classroom Exhibition

With the information you have collected why not create your own classroom exhibition? We’ve included tips in our “How to create a classroom exhibition” resource, available for free from the NMMS website. Did you know we have loan boxes you can borrow for free?

Activity 2. Send your photographs or posters to NMMS

We have a special area in the museum specifically for school projects and we would be happy to display your pupil’s work for all our visitors to see.

Activity 3. Blog or Online Post

Do you have access to a blog or website where you can share your pupil’s work with the world? If your school has a facebook or twitter account you can tag us: @NatMiningMuseum.
Activity 4. Walking tour for parents or classmates

Using the information collected pupils could create their own walking tour or guided tour for parents. Why not take another class on the tour?

Extension Activities

Mining is a fantastic topic to act as a bridge to other topics. Example extension topics include:

1. Victorians or Industrial Revolution
2. Children in the Mine
3. Renewable Energy
4. Scotland’s Industries
5. Global Citizens – explore a country where coalmining is still active
6. Engineering
7. Green House Gases
8. Dinosaurs/ Geology
9. Sports
10. Homes and Houses
Workshops

NMMS’s School’s Programme offers a variety of workshops designed around the Curriculum for Excellence ranging from Social Studies to STEM topics, guided tours at the Lady Victoria Colliery by ex-miners and bespoke outreach activities.

We recommend our “A Mine of Information” workshop. This dynamic workshop is a perfect introduction to everything there is to know about Scotland’s mining industry. The workshop includes introductions to non-renewable energy, children’s lives in Victorian Scotland, the Victorian’s, inventions, Industrial Revolution, steam power, coal power, nationalisation and a history of your local area. This workshop is available at NMMS or in your classroom!

Contact us to request your free School’s Programme brochure or please visit the NMMS website for further workshop information.

*All workshops are subject to availability and costs apply.*

Loan Boxes

NMMS offers a free loan box service for schools. Our loan boxes topics include the Victorians, General Mining, Industrial Archaeology, Bevin Boys, 1940s, 1950s, 1960s and Sports.

All our loan boxes can be borrowed for free and come with handling objects, photographs and memorabilia.

Projects

Our Education team are here to support Scotland’s coalmining communities. If you have a project in mind and would like a tailored service please get in touch today and we will work with you to create your bespoke project.

Contact Information

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