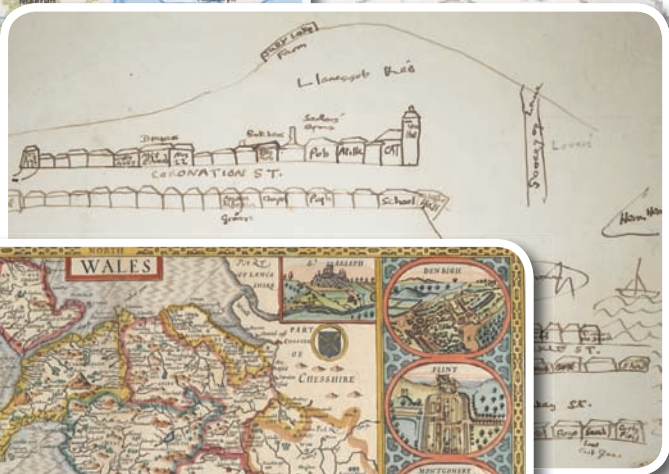


# TREASURES

at The National Library of Wales

# Maps



# Content

This pack was produced for pupils in Key Stages 2 and 3 that are interested in the history and geography of Wales. Its theme is Maps, and its aim is to provide an introduction to the map collection held at The National Library of Wales, and place these within a cultural and historical context. This pack will also introduce pupils in all parts of Wales to some of the nation's treasures.

Although it is not aimed directly at the school curriculum it can be used as an aid in the teaching of several subjects, especially Geography, Art and History.

This pack was produced by The National Library of Wales's Education Service

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This pack is used in schools in Gwynedd, Wrexham and Merthyr Tydfil as part of the National Library of Wales Outreach Project. We would like to thank the Ernest Cook Trust for supporting the pack.

You can see some of the maps from The National Library of Wales's collection on the Digital Mirror under Maps:

[www.llgc.org.uk/digitalmirror](http://www.llgc.org.uk/digitalmirror)

3	Maps
4 - 5	Antiquarian Maps
6	Manuscript Estate Maps
7	Tithe Maps
8	Ordnance Survey (Old) <i>Small scale</i>
9	Ordnance Survey (Old) <i>Large scale</i>
10	Ordnance Survey (Metric) <i>Small scale</i>
11	Ordnance Survey (Metric) <i>Large scale</i>
12	Admiralty Charts
12	Railway Plans
13	Mining Plans
13	Architectural Drawings
14	Thematic Maps
14	Cartouche
15	Distinctive Maps





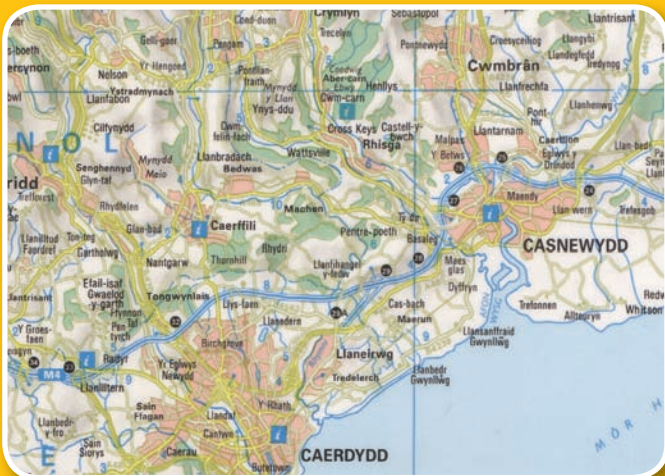
# Maps

If you wanted to find the way to somewhere, where would you look for information? Or what if you were searching for the name of a river or the height of a mountain? You might even be studying the history of a town or village and how they developed over a period of time, or looking for the location of an ancestor's home. You can find the information that will help you answer all of these questions on a map.



Map of Wales, John Speed, 1610

The National Library of Wales collection includes over a million maps, charts and plans. It is the largest collection of maps in Wales, and one of the largest throughout the British Isles. It includes a wide variety of materials, from 15th century charts to the most recent metric maps.



Section of a Welsh map of Wales, OS (Ordnance Survey)  
1:250,000

Although there are thousands of atlases in the collection, most of the maps are loose sheets that are stored flat in drawers. Row after row of these drawers can be seen in the map storage area, and the maps that are too large for the drawers are rolled up and held in special sacks.



Drawers and shelves in the map storage area

The collection focuses on Wales and Britain mainly, but it also includes numerous maps showing other parts of the world. Every country on the face of the earth appears in some form or other in The National Library of Wales collection.



Map table in the South Reading Room

Large map tables are located in the South Reading Room to enable users to consult the larger maps in the collection, whatever their size may be.

## Vocabulary

**Scale** - A way of measuring distance and size on a map e.g. on a one inch map, 1" represents 1 mile.



# Antiquarian Maps

The National Library of Wales holds a large collection of printed maps showing Wales from the 15th century onwards. These maps were in atlases originally but many are now single maps.

## Ptolemy

A printed map showing the British Isles, produced in 1482, is the oldest plan in the National Library's collection. The data for this map was collected by a man called Ptolemy in the second century A.D. for his famous work *Geography of Claudius Ptolemy*. Although this is the earliest record in the Library of Wales on a map, it does not include much detail.



Claudius Ptolemy's map of the British Isles, printed in Ulm, Germany, 1482

## Humphrey Llwyd

The first time Wales appeared on a map as a country on its own was in *Cambriae Typus* by Humphrey Llwyd which dates from the Tudor period. It was first published in the *Additamentum Theatrum Orbis Terrarum* atlas in 1573.



*Cambriae Typus*, Humphrey Llwyd, 1573

## Christopher Saxton



*Radnor, Breknok, Cardigan et Caermarden*, Christopher Saxton, 1579

Christopher Saxton was the first to produce an atlas of the Welsh and English counties. The atlas published in 1579 includes the 13 Welsh counties on 7 maps. Saxton also produced a proof map of Wales in 1580.



Proof Map of Wales, Christopher Saxton, 1580

This map is a great improvement on earlier plans of the country, and portrays the coastline fairly accurately.



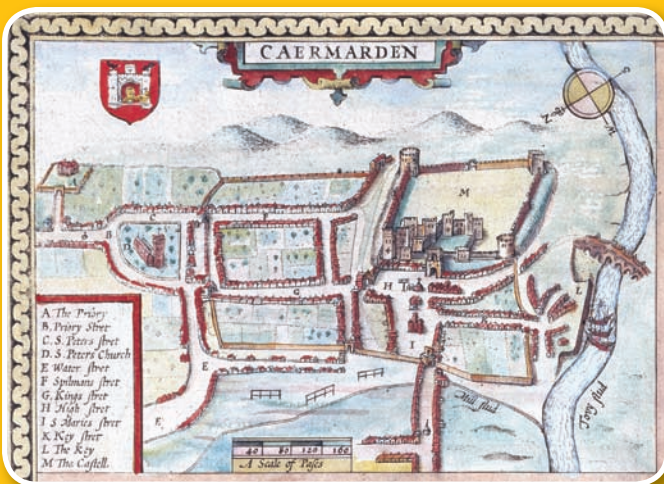
## John Speed

In 1611 John Speed **published** his *Theatre of the Empire of Great Britain* which includes a map of Wales and individual plans of the 13 counties in Wales. The year 1610 is the date noted on most of these maps although a few were drawn before that date.



Caermarden, John Speed, 1610

Speed's work is an improvement on Saxton's because it provides more detail and includes small plans of the important towns on each map. These plans are usually of the county's main market town.



Detail of Carmarthen town from John Speed's *Caermarden*, 1610

You will often see **antiquarian maps** mounted and framed since they are so attractive.

### Vocabulary

**Publish:** To print many copies

**Antiquarian Maps:** Very old maps

## John Ogilby

In 1675 John Ogilby published *Britannia*. Since Ogilby focused on roads, *Britannia* included maps that were very different to those produced by Speed and Saxton. Maps like *The road from London to Aberistwith* and *The Continuation of the Road from Chester to Cardiff* by Ogilby are evidence of the increase in travel on these roads during this period.



*The Continuation of the Road from Chester to Cardiff*, John Ogilby, 1675

Instead of a plan showing a specific area Ogilby's maps would follow the journey between two towns and record the most significant landmarks along the route, like villages, crossroads and rivers.



The map was drawn to look like a long ribbon of paper that had been folded into short sections. The journey on each map begins at the foot of the first strip on the left, and you have to read up from the bottom of each column to follow the route.



# Manuscript Estate Maps

The term given to a map that shows the land owned by someone is an **Estate Map**, and it can show one property or an entire estate.

The National Library of Wales holds a large collection of **manuscript** estate maps relating to Wales, and these vary in date between the 16th and the 20th century.

The people who owned the land usually paid for producing these maps, and they tend to be on a large scale. A key is often included on the map, that notes the fields and their area in acres.

Much of this collection is in volumes where each page shows a different property of the landowner's holdings.



Manuscript Estate Map Volume, *Survey of Several estates... belonging to Jukes Granville Clifton, 1794*



Manuscript Estate Map, *The Mannor of Leighton... the Inheritance of Sir Richard Corbett, William Fowler, 1663*



	Name of Fields	Quantities	Observations
		A R P	
	<i>John Olivers</i>		
1	House Garden and Mill Meadow...	2	5
2	D <sup>r</sup> D <sup>r</sup> and Croft...	3	
3	Calves Close and Garden...	1	3 24
4	Cow Pasture...	3	24
5	Stony Meadow...	2	2 56
6	Quarry Cliff and Quarry...	3	
7	Square Leafow...	2	1 38



Stephan Hughes tenement	F	10	2	0	4
Richard Morris tenement	F	10	2	0	4
Margery Danics tenement	G	10	2	0	4
Editha Ellis tenement	H	10	2	0	4
John Griffiths tenement	I	10	2	0	4
Thomas Roberts tenement	K	10	2	0	4
Anne Woodlens tenement	L	10	2	0	4
Robert Davies tenement	M	10	2	0	4
Richard Griffiths tenement	N	10	2	0	4
Annes Elizabeth Lloyd tenement	O	10	2	0	4
John Roberts tenement	P	10	2	0	4
Martha Griffiths tenement	R	10	2	0	4
William Bowen tenement	S	10	2	0	4
Annes Woodlens tenement	T	10	2	0	4
John Walters tenement	V	10	2	0	4
William Roberts tenement	W	10	2	0	4
Thomas Griffiths tenement	X	10	2	0	4
John Walters tenement	Y	10	2	0	4

On the left is a section of the map showing the layout of the fields, and on the right, the information stating the acreage of each parcel of land, and how much rent was payable.

## Vocabulary

- Estate**: Area of land owned by one landowner
- Manuscript**: A document created by hand
- Unique**: The only one of its kind

Unlike printed maps that were published in their hundreds or thousands, manuscript maps have been drawn and coloured by hand. This makes each manuscript map **unique**.

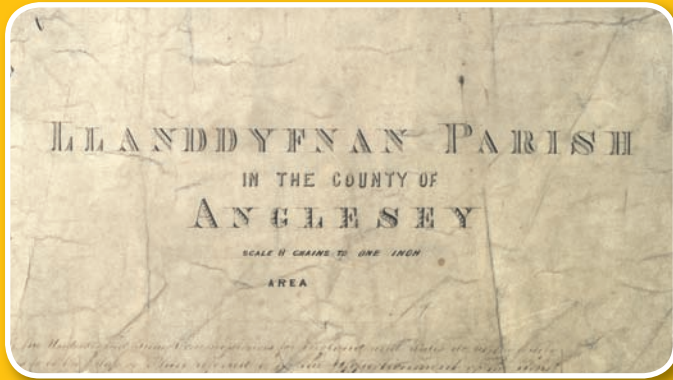
Although a large number of manuscript maps still include the details about the land, some of the schedules have unfortunately been separated from the maps and lost over the years.



# Tithe Maps

In the past people had to pay one tenth of their produce as taxes to support the Church. The term given to this tax was Tithe, and originally it was paid in goods like crops, wool, milk and livestock.

Each parcel of land is numbered and that number corresponds to an entry in the schedule. These details include the name of the landowner and tenants, number of acres, and the sum that had to be paid. The individual field names were sometimes given, and also the use made of the land e.g. 'pasture', 'arable' or 'meadow'.



Title of Llanddyfnan Tithe Map, 1841



Section of the Llanddyfnan Tithe Map, 1841

To maintain consistency it was decided that it would be better for people to pay the tax in money rather than goods. This meant that details about the acreage of each farm had to be collected, so that it could be decided how much tax was due. Following the Tithe Commutation Act in 1836 surveyors produced maps and schedules to record this information, and almost every parish throughout Wales was surveyed. Most of the Tithe Maps for Wales date from between 1839 and 1852.

Due to their detailed nature, Tithe Maps are considered to be a very important source of information for historians. They are also still referred to today by lawyers trying to establish who owns a piece of land or road, over a century and a half after they were produced.

The schedule that accompanies each map makes the Tithe Map useful to researchers.

Section of the Llanddyfnan Tithe Schedule, 1841

LANDOWNERS.	OCCUPIERS.	NUMBERS referring to the Plan.	NAME AND DESCRIPTION OF LANDS AND PREMISES.	STATE OF CULTIVATION.	QUANTITIES IN STATUTE MEASURE.		Amount of Rent-Charge apportioned upon the several Lands, and Payable to the	REMARKS.
					A.	R.		
George Sir Harry Dent Bar <sup>t</sup> . cont <sup>d</sup>	Mary Owen cont <sup>d</sup>	620	Part of Cae Panty	Brought forward	424	3 17	19 9 9	
		622	Cae Chwast	Pasture	2	3	2	
		622a	Rhos Ffynon	Arable	2	3	3	
		623	Rhos bach	Pasture	1		2	7/2
		624	Cae hen lon buch	do	2	3	10	
Robert Owen	Tŷn y Felon	169	Cae Flaen ddu	Meadow	3	1	3 2	
		149	Part of Cae Flaen ddu	Pasture	3		3 1 1	
		148	Part of Cae Flaen ddu	do	1	9	4	
		148a	Part of Cae Flaen ddu	Arable	1	12	1 8	
William Parry	Tŷn Strydiart	161	Part of Cae cefn	Meadow	1	12	1 5	
		438	Cae y Gallat	Arable	1	1	3	
		432	Cae gwanod	do	2	3 16	3	
		433	Cae Bryn Clonion	do	4	1 16	5	
		434	Cae cae mwydd	do	5	1	6	
		431	Mynydd mawr	Pasture	15	7 17	4	
John Thomas	Tŷn ysgaw	546	Water		1	5 2		
		20	Plain	Arable	1	3 14	1 11	
		26	Plain	Pasture	1	1 20	1 7	



# Ordnance Survey

The Ordnance Survey (OS) is the mapping agency for Great Britain. It was founded in 1791 and has published a variety of maps for all parts of the United Kingdom ever since. In the 1790s the OS began mapping parts of the English coastline under threat from France, and the first OS map was published in January 1801.

In later years the areas being mapped were extended, and by now the OS maps all parts of the United Kingdom. The National Library of Wales has the right to a free copy of every map published by the OS. Here is a brief look at some of the different scales and editions published by the agency during the last two centuries.

The maps are split into **small scale** and **large scale**, and old and new. Before the 1970s the OS published maps that used feet and inches and the old imperial measurements, but by now they use metric measurements.

## Ordnance Survey Maps: Small Scale (Old)

### OS 2" to the Mile

These were the first maps of Wales drawn by the OS, and they derive from the original drawings produced during the initial **survey** at a scale of two inches to the mile.



Extract from an OS 2" to the mile map, Sheet 181/2, 1809

The drawings from the original survey are the earliest detailed maps available for most areas throughout Wales. Unlike earlier printed maps, these plans offered greater detail and showed farms, roads, rivers and woodland. The maps date from between 1809 and 1836, and although they weren't coloured, shading was used to show hills and escarpments.

### OS 1" to the Mile

All the information compiled during the original survey was used to produce the first series of topographical maps for the British Isles, on a scale of 1" to the mile.



OS 1" to the mile map, Sheet 40, 1819



The 20 sheets that cover Wales were published between 1818 and 1840. By this period people were travelling further from home, and later editions of the 1" map were used pretty much like we use road atlases today.

### Vocabulary

**Large Scale:** Detailed map

**Small Scale:** Map with less detail

**Survey:** The gathering of information



## Large Scale Ordnance Survey Maps (Old)

By the middle of the nineteenth century maps offering greater detail than the one inch map were needed so that more information could be included, and by the 1870s the OS were publishing large scale maps of Wales at 6" and 25" to the mile. These were known as the *County Series*.

## 6" Maps

The whole country was mapped in this scale, so it is useful to someone researching rural or mountainous areas. Generally, the same information appears on the 6" and the 25" scale, only it appears smaller on the 6" map.



OS 6" to the mile map, Glamorgan XLIII.NW, 1901



The 6" map does not show every street name nor does it show all individual buildings. It offers moderate detail over a fairly large area, and uses special lines (contours) to indicate the height of the land above sea level.

## 25" Maps

These plans are large in size and scale with the sheets measuring over a metre across. They offer assistance when researching towns and cities because they show individual buildings. In addition, each parcel of land has been numbered, with its area noted in acres. Colour was used on many of the first edition sheets to show roads, houses and water, but later editions use black and white only. Due to the detail provided on these maps, mountainous areas were not mapped in this scale.



OS 25" to the mile map, Cardiganshire XXIV.3, 1888



Maps were produced in an even larger scale of ten feet to the mile for the main towns and cities.



Part of an OS 10 foot to the mile map, Wrexham XXVIII.12.2



## Small Scale Ordnance Survey Maps (Metric)

Maps have changed significantly with time. Today it is possible to gather precise data in order to create detailed plans by using technology such as **GPS** equipment.

One of the main differences in modern mapping is that they are metric and have been set on a grid of squares. It is possible to locate any point on these maps by using a grid reference. This is done by reading the numbers along the bottom of the map followed by the numbers up the side. For example, the grid reference for The National Library of Wales on an OS 1:2500 map is SN594816, therefore find 594 across the bottom and 816 on the side.

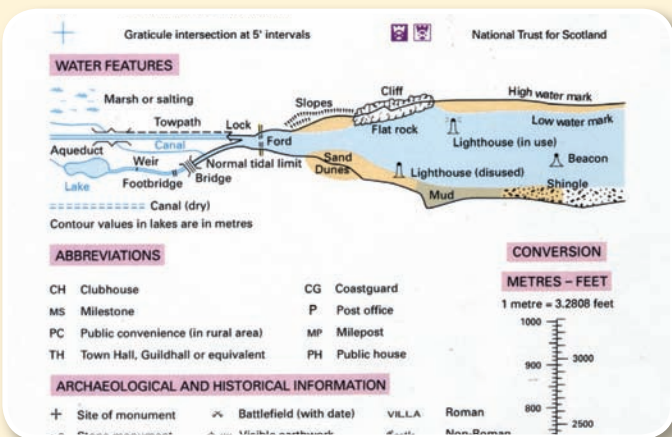
## 1:50,000 Maps (Landranger)

The Landranger replaced the old 1" to the mile maps. This map is used to show large areas in limited detail.



Part of an OS 1:50,000 map, Sheet 117, 2003

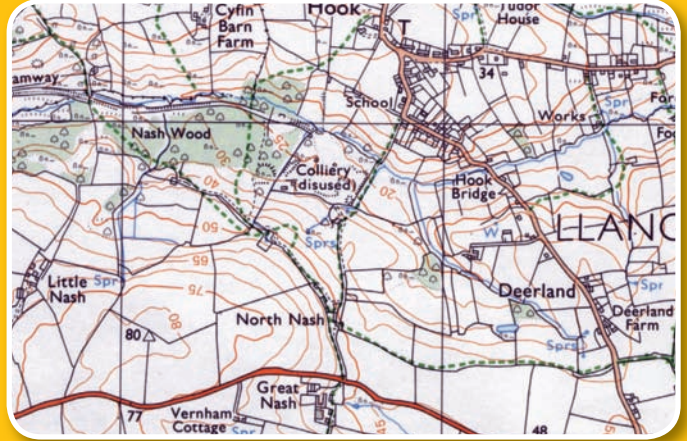
Although the 1:50,000 map is not very detailed, it notes public places such as schools, hospitals, car parks and historical places, and a key is included on the side of the map to explain the symbols.



Extract from the key to an OS 1:50,000 map

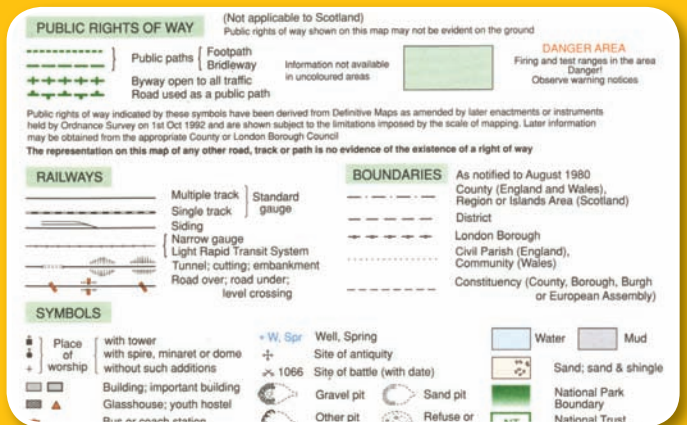
## 1:25,000 Maps (Pathfinder)

If you like walking in the countryside or mountaineering you may be familiar with the Pathfinder map. This series was developed in the 1940s due to the gap in scale between the 1" and the 6" maps, and it was thought that this scale (1:25,000) was the smallest that could accommodate contours.



Part of an OS 1:25,000 map, Sheet SM81, 1991

As the name Pathfinder suggests, these maps show rights of way for public paths. For example, different markings are used to distinguish between 'footpaths' and 'bridle paths', and the scale is detailed enough to show field boundaries.



Extract from the key to an OS 1:25,000 map

Current 1:50,000 and 1:25,000 maps are published on large sheets, but they are sold to the public as folded maps making them much easier to store and use.

## Vocabulary

**GPS:** Global Positioning System  
(Technology that uses satellites)

**Bridle path:** Path for travelling on horseback

**Digital:** Available in electronic form



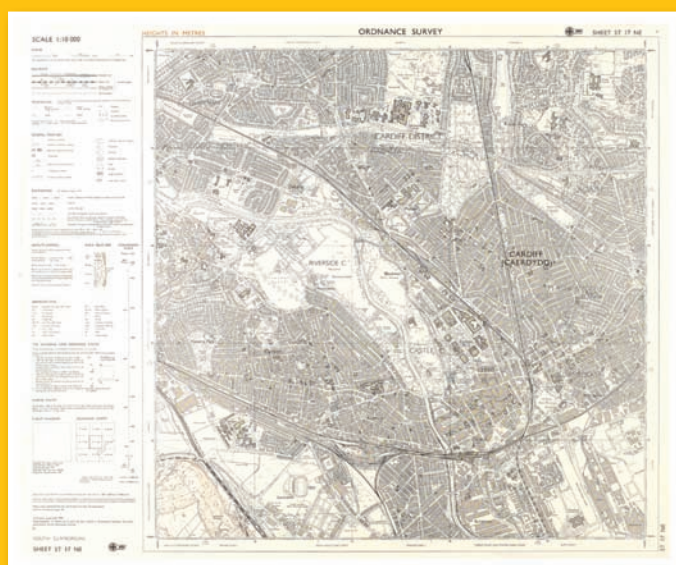
## Large Scale Ordnance Survey Maps (Metric)

The 1:10,000 and the 1:2500 are the metric versions of the old 6" and 25" maps. The Library used to receive paper copies of these but the Ordnance Survey no longer publishes them. The data is now stored in **digital** format by the OS, and only the 1:2500 maps are transferred to Aberystwyth on CDs for viewing. The Library's collection includes paper copies of these scales published between the 1950s and the mid 90s.

All Ordnance Survey maps are protected by Crown Copyright which means that the Library can only provide an A4 copy of any map published within the last 50 years for its readers.

## 1:10,000 Maps

This is the largest scale in which all of the country was mapped. It is detailed, but not all buildings are shown individually.



OS 1:10,000 map, Sheet ST 17NE, 1991

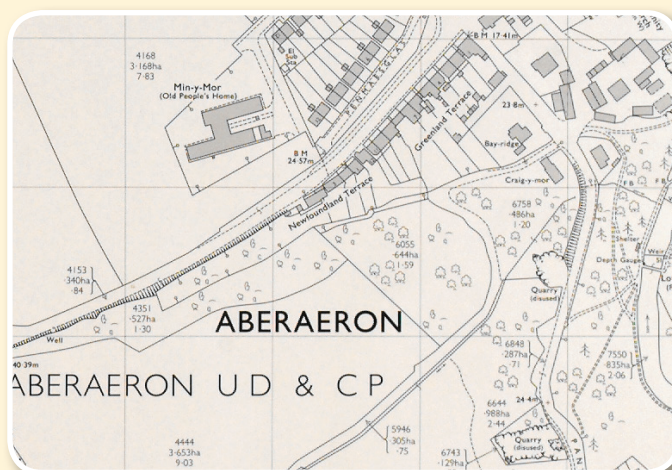


## 1:2500 Maps

Although the OS has maps that provide much more detail than this for certain areas, the 1:2500 map offers the main large scale coverage for most of Britain. However, due to its detail, remote mountainous areas have not been mapped in this scale.



OS 1:2500 map, Sheet SN4562, 1974



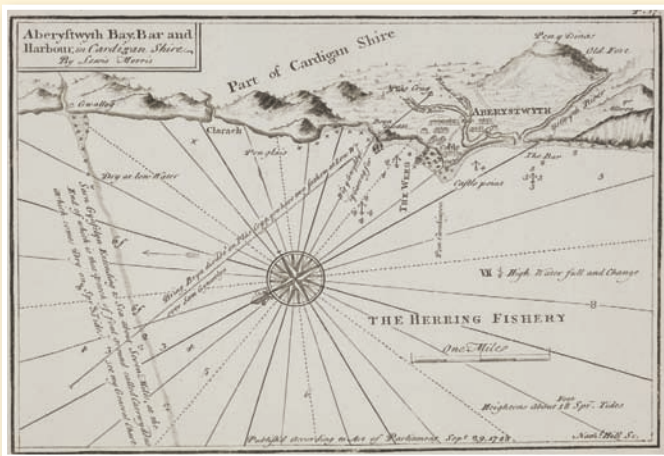
Each parcel of land has been numbered and contains its area in hectares. When farmers register the land in their possession, they do so by listing the *field numbers* shown on the 1:2500 map. It is also detailed enough to show street names and most individual buildings, and is therefore the map used for planning applications when someone is seeking permission to build a new house.



# Nautical Charts

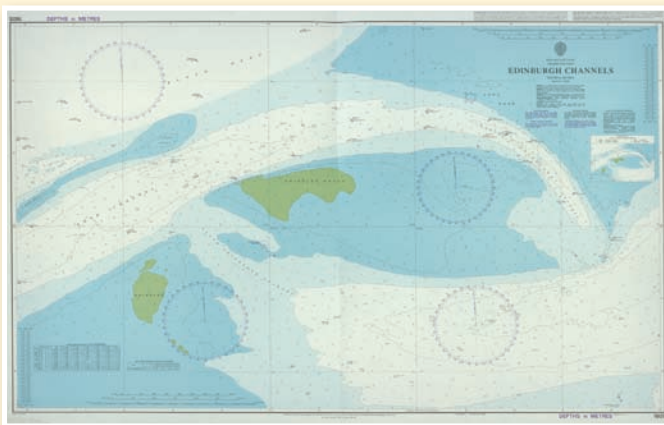
For centuries people have sailed the seas with charts and maps to show their location. Despite the availability of modern equipment to assist mariners, charts and maps are still used today to navigate the oceans safely.

A **nautical** chart is a map that shows the sea and the coastline. It may provide information about the depth of the water, the altitude of the land, what is on the seabed, and much more depending on how detailed it is.



*Aberystwyth Bay, Bar and Harbour in Cardigan Shire, Lewis Morris, 1748*

The charts were designed as documents to be used every day, and mariners would frequently amend them or write notes on them. A nautical chart would be thrown away once it became dated or damaged, and as a result these are less likely to have survived.



*Admiralty Chart, Sheet 2864, 1992*

The National Library of Wales's collection of Admiralty Charts includes plans of all the world's oceans.

# Railway Plans

During the nineteenth century a network of railways grew throughout Wales reaching almost every district. These plans show the development of the railways and are an important record of a busy period in our country's history. The growth of the railways had a great effect on the landscape of Wales, and the maps that illustrate this growth offer assistance to those researching the past.



*Railway Plan of Llantrisant and Taff Vale Junction Railway, George Fisher, 1864*

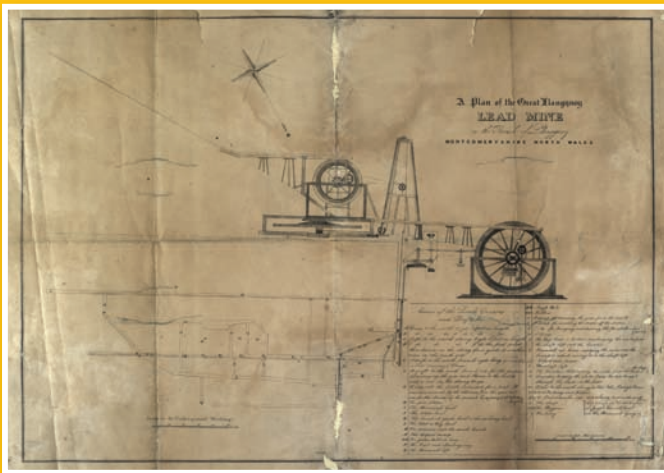


The railway plans at the National Library mostly date from between 1860 and 1900, and show the intended course of the railway accompanied by cross-sections of the land and geological information about the sites.

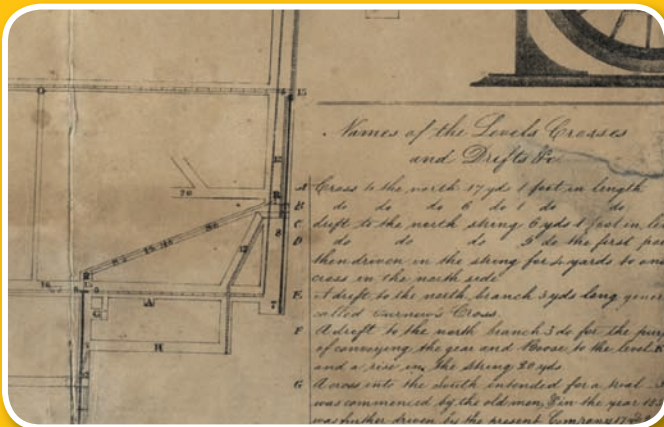


# Mining Plans

**M**ining plans can be useful to those researching the past, in particular someone who is interested in the industrial history of Wales. They relate to the growth in industry that had a massive effect on rural communities in Wales during the 19th century.



Mining Plan, *A Plan of the Great Llangynog Lead Mine*, 1839



The collection consists mostly of lead mine plans, especially those in north Ceredigion, and plans of slate mines in north Wales. They include plans of buildings, the works, underground shafts and the veins.

## Vocabulary

- Nautical:** Relating to the sea
- Civil buildings:** Public buildings
- Architectural Drawings:** Designs and plans used to construct a building

# Architectural Drawings

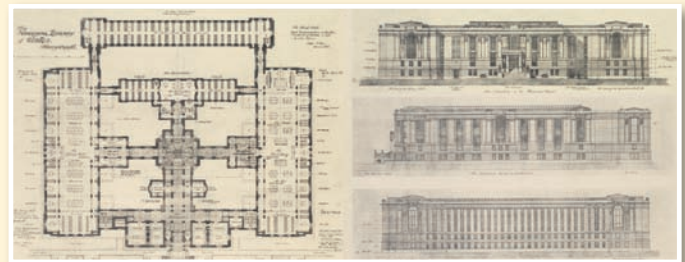
**W**ithin the National Library's extensive holdings of maps and plans there is also a collection of architectural drawings, mostly relating to mid and south Wales.

The majority of these drawings are technical draughts, although some do also include an artist's impression of the completed building. Most of the works date from the end of the 19th century and the beginning of the 20th century when industry and towns grew rapidly in Wales. They include plans of houses, **civil buildings**, churches and chapels.



Architectural plan, *House Corner Site Vardre Park Estate*, 1934

The drawings vary from pencil sketches to wonderful watercolours. Some of the pictures are really important to us because they show buildings that have since disappeared. Others show buildings that were not actually built, but they remain an invaluable record of bygone fashions and styles.



The National Library of Wales, *Sidney Greenslade*, 1909



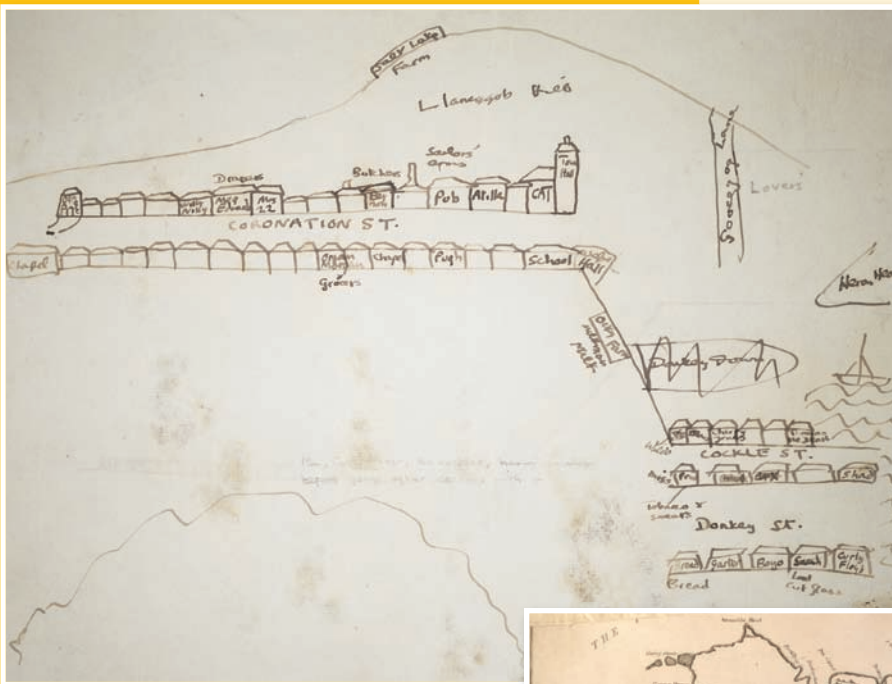






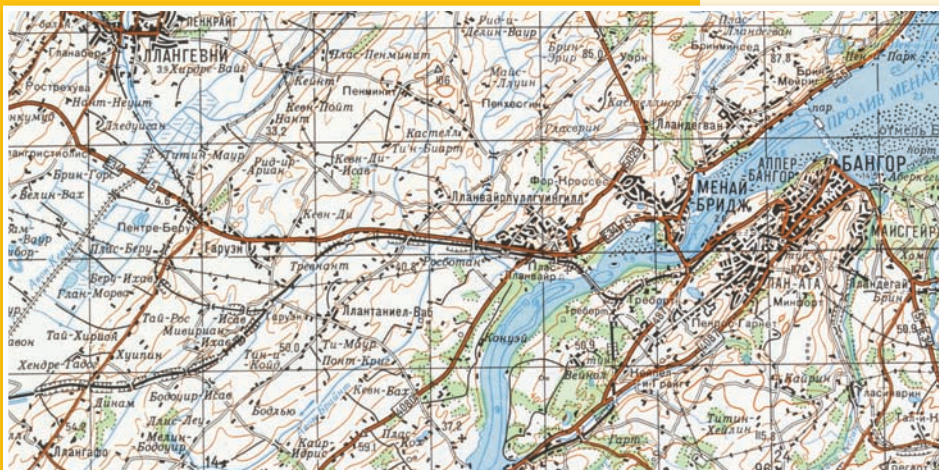
# Distinctive Maps

There are some remarkable maps in The National Library of Wales that are of special interest due to their content.



Here is a map drawn by Dylan Thomas of the imaginary village *Llaireggub* from his play *Under Milk Wood*. The map shows the locations that are referred to in the famous play, like *Coronation St* and *Donkey St*, and a few of the characters' names, like *Garther* (Polly Garther) and *CAT* (Captain Cat), have been noted on some of the houses.

This map was commissioned to commemorate an historic event in Pembrokeshire, when a French army landed at Pencaer near Fishguard with the intention of conquering the country. The Frenchmen's attempt ended in failure, and after two days a surrender agreement was signed at the Royal Oak public house in Fishguard. This was the last time that an invading army set foot on British soil.



This map is from a series once held by the former Soviet Union during the Cold War. It is believed that had the decision been taken to invade Britain, these maps would have been issued to the Soviet soldiers. On this section of a 1:100,000 map published in 1980, Bangor and the Menai Straits are shown with all the placenames in Russian.



Year

Century	HISTORICAL EVENTS	Year	MAPS	Page
15th	Johannes Gutenberg completes the first printed volume	1450		
16th		1482	Ptolemy's map is published in Ulm, Germany	4
		1573	<i>Cambriae Typus</i> by Humphrey Llwyd	4
		1580	Christopher Saxton's proof map of Wales	4
17th	Bishop William Morgan's Welsh Bible is published	1588		
		1610	John Speed's Welsh counties	5
		1675	<i>Britannia</i> , a volume of British road maps by John Ogilby	5
18th		1748	<i>Aberystwyth Bay</i> Marine chart by Lewis Morris	12
	Ordnance Survey is officially formed	1791		
19th		1797	French Invasion map	15
		1809	OS 2" to the mile map, Sheet 181/2	8
		1819	OS 1" to the mile map, Sheet 40	8
	Beginning of the 'Rebecca Riots'	1839		
		1841	Llanddyfnan Tithe Map and Schedule	7
		1864	<i>Llantrisant and TaffVale Junction</i> Railway Plan	12
20th		1901	OS 6" to the mile. Glamorgan XLIII.NW	9
	Founding The National Library of Wales	1907		
		1909	Architectural Plans of The National Library of Wales	13
		1920	British Geological Survey map, Sheet 228	14
		1954	Map of Liareggub by Dylan Thomas	15
	Aberfan disaster	1966		
		1974	OS 1:2500 map, Sheet SN4562	15
		1991	OS 1:10,000 map, Sheet ST17NE	11
21st		2003	OS 1:50,000 map, Sheet 117	10
	The National Library of Wales celebrates its centenary	2007		