

Lloyds Bank

We do hope you enjoyed the walk and hopefully you have learnt a little more about the geology of Mold and why it is so important to conserve it!

Few people realise how the buildings that make up the town reveal a history that goes back over millions of years. We will look up, down and straight ahead at small, medium and large-scale features. Join us on a walk to explore this history stretching back through time.

The majority of the stone in Mold is local. Very little has been imported. This may be due to Mold's inland location as most stone was and is transported by water. The most common building stone used in the town is local sandstone. Sandstones are formed from beach, river or desert sands being cemented together to form a rock. The roofs are made of local slate or states imported from Blaenau Ffestiniog in Snowdonia. Exotic imported rocks will be highlighted to you along the trail. These came from as far afield as Norway.

Mold is built on glacial till, the unsorted mixture of sediments deposited by glaciers from the last Ice Age, about 18,000 years ago. These deposits caused the River Alun to be diverted east into the Cheshire basin and thus join up with the River Dee at Rossett instead of flowing a short distance north into the Irish Sea. You will see the river on the Town trail.

Rocks of Mold

Norman acquisitions in the northeast part of Wales. The castle was unusual in that it had two baileys. The motte still exists and can be seen today.

Y creigiau y byddwch chi'n eu gweld o gwmpas Yr Wyddgrug:

The rocks you will see around Mold:

Creigiau gwaddod: Mae'r rhain wedi eu gwneud o dywod, silt, llaid, cerigos a gweddillion planhigion ac anifeiliaid. Fe'u dyddodwyd ar wely moroedd ac afonydd neu ar ffurf twyni mewn diffeithdroedd ac, ymhen hir a hwyr, wedi iddynt gael eu claddu dan bentwr o greigiau eraill, cawsant eu cywasgu a'u smentio gan greu'r creigiau gwaddod a welir heddiw.



Sedimentary rocks are made of sand, silt, mud, pebbles, and fragments of plants and animals. These were deposited in seas, rivers or as dunes in a desert, and, eventually, after burial beneath a pile of other rocks, are compressed and cemented into the rocks we see today.

Creigiau igneaidd: Ffurfir y rhain wrth i graig dawdd (magma) grisialu. Caiff magma ei wthio ar hyd gwendidau yng nghramen y Ddaear, gan ddod i'r wyneb weithiau yn ystod echdoriadau folcanig.



Igneous rocks are crystallised from molten rock (magma) which is forced into weaknesses in the earth's crust, sometimes coming to the surface as volcanic eruptions.

Creigiau metamorffig: Mae'r rhain yn greigiau igneaidd neu waddod sydd wedi cael eu newid gan wres a/neu wasgedd. Er enghraifft, gall carreg laid newid i fod yn llechfaen, a chalchfaen yn farmor.



Metamorphic rocks are igneous or sedimentary rocks that have been changed by heat and/or pressure. For example, mudstone can be changed into slate, and limestone into marble.

'Creigiau gwneud': Mae'r rhain yn cynnwys briciau, a gynhyrchir drwy bobî clai, ac hefyd choncrit.



'Man-made rocks' include clays, which have been baked to form bricks, and also concrete.

Photography by Stewart Campbell, Cynthia Burek & Raymond Roberts.

The existing settlement of Mold dates from Norman times and Lord's lands in Normandy, Montalt. The Norman family of Montalt erected the original motte and bailey castle on the Bailey Hill site around 1093 A.D. It is one of the earliest

Mold is a busy market town and the County Town of Flintshire. Traditional street trading has been part of the local scene in Mold since the 17th century and the tradition still lives on today, with a bustling street market held every Wednesday and Saturday. It is situated 11 miles from the border with England and is close to the Clwydian range of hills, designated as an Area of Outstanding Natural Beauty (AONB).

Introduction

View across Alun Valley



Rydym yn gobethio eich bod chi wedi'i mwynhau ac wedi dysgu tipyn bach mwy am ddaearog Yr Wyddgrug, a pham ei bod hi mor bwysig i'w gwarchod.

Ychydig iawn o bobl sy'n sylweddoli sut mae adeladau trefol yn datgela hanes sy'n ymestyn yn ôl ffilynau o flynyddoedd. Byddwn yn edrych ar i'fny, ar i'lawr ac yn yst o'n blaenau at nodweddion bach, canolig a mawr. Ymunwch â ni ar dath i archwilio'r wedd yma ar hanes sy'n ymestyn yn ôl mewn amser.

ddefnyddiwyd ac a ddefnyddir i gludor'n than fwyaf o gerrig. Tywodfaen lleol yw'r cerrig adeladu mwyaf cyffredin a deffnyddiwyd yn y dref. Ffurir tywodfaen o'r dywod trefol, aon neu ddiffethidir sydd wedi'i smentio at ei gilydd i greu craig. Yn ddostor'toau mae llechi lleol neu lechi a ddaeth o Flaenau Ffestiniog yng Ngwynedd. Ar y dath, tynnir eich sylw at y creigiau estron a fewnforiwyd. Daeth y rhain o lefydd mor bell i ffwrdd, â Norway.

Beth yw RIGS?

Gall Safleoedd Ddaearog/Geomorffolegol o Bwysigrwydd Rhanbarthol (Regionally Important Geological/Geomorphological Sites) fod yn unrhyw safleoedd, ac eithrio Safleoedd o Ddiddordeb Gwyddonol Arbennig, a gaiff eu gwarchod oherwydd eu pwysigrwydd addysgol, ymchwil, hanesyddol neu esthetig.

Grwpiau RIGS

Gall unrhyw aelod o'r cyhoedd a chanddo ddiddordeb mewn cadwraeth Trefadaeth y Ddaear ymuno â grŵp RIGS. Mae'r grŵp yn dewis y safleoedd sydd wedyn yn cael eu gwarchod gan awdurdodau lleol. Gyda chydweithrediad perchenogion, datblygir rhai safleoedd at ddefnydd addysgol neu gan y cyhoedd.

What are RIGS?

Regionally Important Geological/Geomorphological Sites (RIGS) are any sites, excluding SSSI (Sites of Special Scientific Interest) that are protected for their educational, research, historical or aesthetic importance.

RIGS Groups

Any member of the public with an interest in Earth Heritage conservation can join a RIGS group. They choose sites which are then protected by local authorities. With the co-operation of the owners, some sites are developed for educational or public use.

Os hoffech ymuno â grŵp RIGS yn yr ardal hon, cysyllter â:

If you would like to join RIGS in this area, please contact:

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Chester. CH1 4BJ
Eboast – Email: c.burek@chester.ac.uk



Mae Cynghor Cefn Gwlad Cymru yn cefnogi sefydlu Safleoedd Ddaearog/Geomorffolegol o Bwysigrwydd Rhanbarthol.

The Countryside Council for Wales supports the establishment of Regionally Important Geological Sites.

Cynhyrchwyd gyda chymorth Cynllun Taliadau Bychan Gronfa Amgylcheddol Hanson



Production assisted by Hanson Environmental Fund Small Payment Scheme.



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Codwyd Yr Wyddgrug ar ddi, dyddoddyr rhewlifol sy'n cymwys cymysgfa o waddodion, heb eu didoli, a adawyd ar ôl gan len i'r Rhewlifant Claf, tua 18,000 o flynyddoedd yn ôl. Effaith y dyddodion hyn oedd troi aton Alun o'i chwrs, gan achosi iddi lifo tua'r de-ddwyrain i gyfeiriad Gwastadedd Sir Gaer ac ymuno ag aton Dyfrdwy ger Yr Orsedd, yn hytrach na dilyn cwrs byrtrach tua'r gogledd a Môr Iwerddon. Byddwch yn gweld yr aton ar eich tath o gwmpas y dref.

Creigiau Yr Wyddgrug

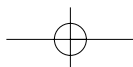
Mae'r Wyddgrug yn dyddio o gyfnod y Normaniaid. Mae'r emw yn gyfuntad o'r ddau atir "gwydd" sy'n golygu "camedd" a "crug" yn golygu "brnycyn". Credit bod emw Saesneg y dref yn tarddu o'r gair "Montalt", set tbroedd un o'r arglwyddi Normanaid yn Normandi. Cododd y teulu Normanaid i Montalt y castell munt a beili gwreiddiol ar Bailey Hill tua'r flynyddyn 1093. Roedd y safle gyda'r cynth a feddianau'r Normanaid yng ngogledd-ddwyrain Cymru. Roedd y castell yn anafereol gan fod iddo ddau fell. Mae'r munt i'w weld hyd heddiw.

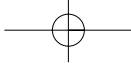
Mae'r Wyddgrug yn dref farchnad brysur ac yn dref sirol Sir Y Flint. Mae masnachu ar y stryd wedi bod yn rhan annatod o tradodiad yn fyw ac yn iach heddiw gan fod marchnad stryd fywog yn cael ei chymnal bob dydd Mercher a dydd Sadwrn. Mae'r dref wedi'i lleoli 11 milltir o'r fin, â Lloegr ac nid nepell o Fryniau Clwyd, sydd wedi eu dynodi'n Ardal o Harddwch Natïol Eithriadol.

Stryd Fawr

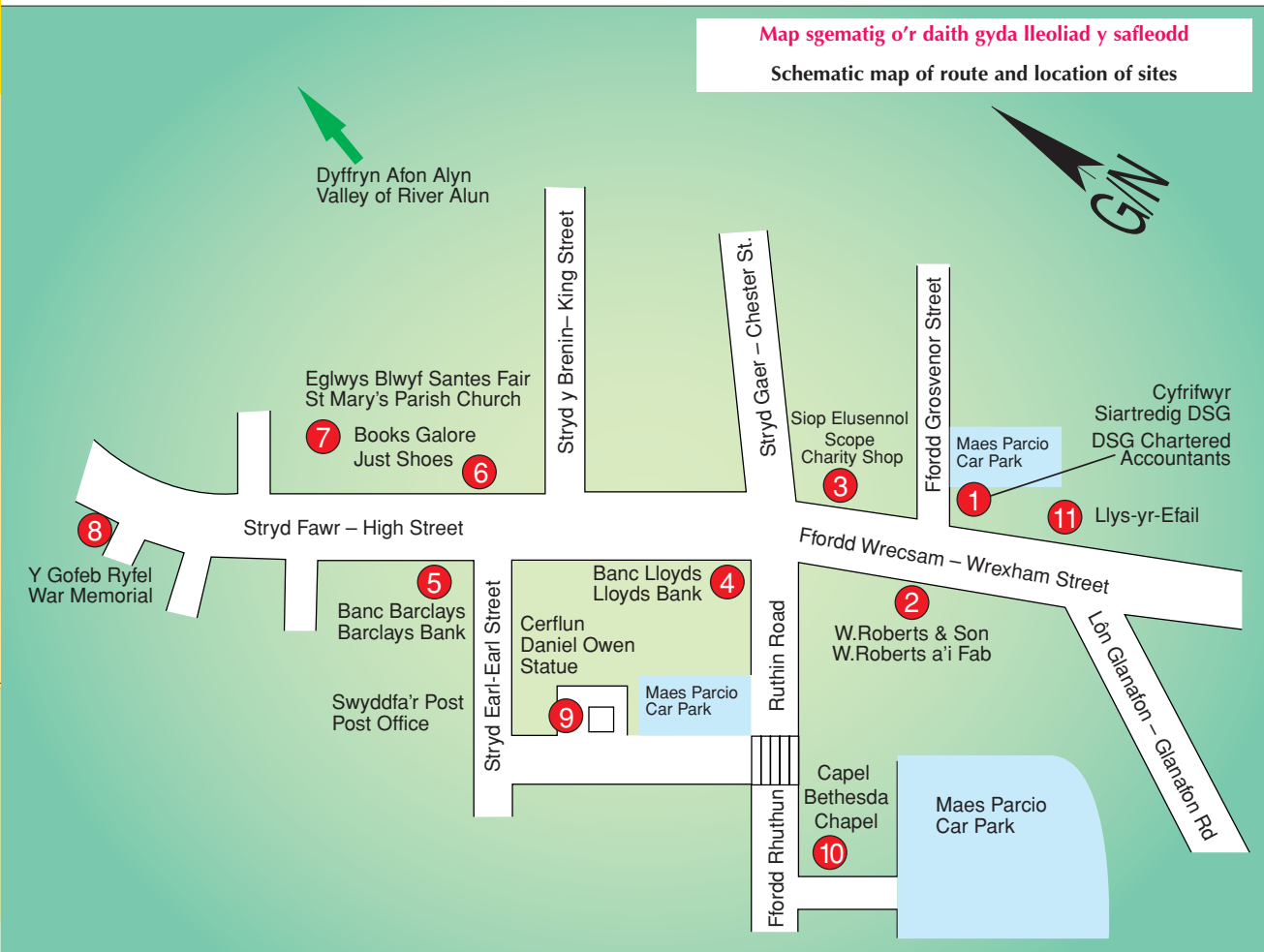


Cerdded drwy'r gorffennol: Taith ddaearog o gwmpas Yr Wyddgrug
Walking through the past: A geological trail for Mold





Map sgematig o'r daith gyda lleoliad y safleoedd
Schematic map of route and location of sites



1 Cyfrifwyr Siartredig DSG

Mae'r cerigos ar y llawr y tu allan i'r adeilad hwn o ddi-ddordeb arbennig. Maent yn dyddio o'r cynnod Triasig (250 o filiynau o flynyddoedd oed) ac yn perthyn i oes y deinosoriaid. Maent yn galed iawn ac wedi eu gwneud o'r un defnydd, gwydr (silicon). Mae llawer o haenau cerigos yn ardal Stoke ac yn ôl pob tebyg mae'r rhain wedi dod oddi yno.



DSG Chartered Accountants

The pebbles outside this building are of particular interest. They are Triassic (250 million years old) and come from the age of the dinosaurs. They are very hard, made from the same material as glass (silicon). There are many pebble beds like this in the Stoke area and these have probably come from there.

2 W. Roberts a'i Fab

Wrth i chi ddilyn y daith, fe sylwch mai llechi yw prif ddefnydd toi'r Wyddgrug. Nid yw eiddo W. Roberts a'i Fab yn eithriad. Yn ôl pob tebyg mae'r llechi hyn wedi dod o Flaenau Ffestiniog yng Ngwynedd.



W. Roberts & Son

As you walk around the trail, you will notice that slate is the main roofing material of Mold. W. Roberts & Son is no exception. The slate here has probably come from Blaenau Ffestiniog in Snowdonia.

3 Siop Elusenol Scope

Larvikit yw rhan isaf'r adeilad hwn. Caiff y graig igneaidd hon ei chloddio yn ne Norwy yn unig. Wrth edrych yn fanylach, fe welwch fod y crisialau (ffelsbar) yn disgleirio yn wyneb yr haul. Tybed a gewch chi hyd i'r graig hon ar flaen Burrel News yn y Stryd Fawr?



Scope Charity Shop

The base of this building is igneous larvikite, quarried only from Southern Norway. On closer inspection, you will notice the reflecting crystals (Feldspar), which sparkle in the sun. Can you spot this rock at Burrel News on the High Street?

4 Banc Lloyds

Wedi ei chodi gan gwmni marchnad Yr Wyddgrug yn 1849, mae'r muriau o dywodfaen a gloddiwyd o'r Cystadau Glo lleol. Beth yw lliw'r tywodfaen? Sylwch ar yr haenau yn y graig a'r defnydd a wnaed o feini heb eu naddu yn wal gefn yr adeilad. Craffwch ar y gronynnau tywod. Ydyn nhw i gyd o'r un maint?



Lloyds Bank

Built in 1849 by the Mold Market Company, the walls are sandstone, quarried from local Coal Measures. What colour are they? Notice the bedding in the rock and how the material at the rear is roughly hewn. Look closely at the sand grains. Are they all the same size?

5 Banc Barclays a Charreg Goffa Ambrose Lloyd

Codwyd y banc o garreg Portland, calchfaen Jwrasig nadd o Dorset. Adeiladwyd Swyddfeydd y Sir yn Heol Iarl' o'r un garreg. Mae'n cynnwys gweddillion cregyn môr tua 150 miliwn o flynyddoedd oed. Fedr'wch chi eu gweld nhw? Mae carreg goffa ar ran uchaf yr adeilad yn dwyn i gof John Ambrose Lloyd (1815-74), un o gyfansoddwyr tonau emynau enwocaf Cymru. Darn o farmor yw'r garreg, craig fetamorffig a gafodd ei phobi gan natur. Os craffwch arni, efallai y gwelwch y llinellau tonnog sy'n rhedeg drwyddi.



Barclays Bank and Ambrose Lloyd Plaque

This is made of Portland Stone, a shaped Jurassic limestone from Dorset. The County Offices on Earl Road have been built of the same material. It is composed of shell fragments about 150 million years old. Can you spot them? A plaque on the upper part of the building commemorates John Ambrose Lloyd, born in 1815, one of Wales' most famous hymn composers. It is made of marble, a metamorphic rock that has been baked by nature. If you look closely, you may be able to notice the wavy lines through it.

6 Books Galore a Just Shoes

Yn union gyferbyn, Banc Barclays mae dau adeilad brics ac ar eu toeau ceir llechi metamorffig. Nid yw briciau'n naturiol, ond o waith dyn.



Books Galore and Just Shoes

Directly opposite Barclays Bank are two brick buildings with metamorphic slate roofs. Bricks are not natural, but man made.

7 Eglwys Blwyf y Santes Fair

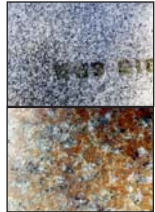
Codwyd Eglwys y Santes Fair ar safle eglwys gynharach (1253). Comisiynwyd yr adeilad eglwysig hardd hwn gan Margaret Beaufort fel modd i ddiolch am fuddugoliaeth ei mab, Harri Tudur, ym Mrwydr Bosworth yn 1485. Cymerodd tua 100 mlynedd i gwblhau'r gwaith o godi'r eglwys. Codwyd ei muriau o dywodfaen, sydd wedi gwrthsefyll, i raddau helaeth, y gwahanol brosesau hindreulio. Edrychwch ar i fyny ar y cerfluniau o bobl ac anifeiliaid. Ydy hi'n bosib gweld y manylion o hyd? Oes modd gweld eu hwyneb'au? Ym mynwent yr eglwys gallwch weld y tri phrif fath o graig: Igneaidd, Metamorffig a Gwaddod. Gellir gweld cerrig beddau gwenithfaen (igneidd) o wahanol liw. Y mwynau (ffelsbarau yn bennaf) o wahanol liw sy'n gyfrifol am hyn. Gellir cymharu beddfaen llechfaen, yn dyddio o 1875 â thywodfaen traddodiadol o oedran tebyg. Pa garreg sydd rhwyddaf i'w darllen? Prin bod y llechfaen wedi hindreulio ond mae bron yn amhosib darllen yr arysgrifen ar y tywodfaen.



St. Mary's Parish Church

St. Mary's Church is built on the site of an earlier church (1253). Margaret Beaufort commissioned this fine ecclesiastical building as an offering for the victory of her son Henry Tudor at the Battle

of Bosworth (1485). The building of the church took about 100 years to complete. Its walls are made of sandstone. It has stood up well to the various processes of weathering. Look up at the statues of people and animals. Can you still make out the details? Can you still see their faces? In the church graveyard; you can see the three main rock types – Igneous, Metamorphic, and Sedimentary. Gravestones of different coloured granite (igneous) can be seen. This is due to the different coloured minerals (Feldspars). A slate (metamorphic) gravestone from 1875 can be compared with traditional sandstone of a similar age. Which can be read more easily? The slate has hardly weathered unlike the sandstone where the writing can hardly be read.



8 Y Gofeb Ryfel a'r safle

Mae'r llecyn hwn o ddi-ddordeb arbennig. Gellir gweld nifer o wahanol fathau o greigiau yma. Gwnaed y gofeb, sy'n coffau'r rheini a laddwyd yn ystod yr Ail Ryfel Byd, o wenithfaen gwyn. Mae carreg cwarts i'w gweld wrth droed y grisiau sy'n arwain i fyny at blac Maes Coffa'r Wyddgrug. Mae'r plac ei hunan o farmor. Gan edrych ar draws y ffordd, fe welwch ddau biler calchfaen. Sut mae'r pileri hyn yn cymharu â mur tywodfaen yr adeilad gerllaw?



War Memorial and surroundings

This area is of particular interest. A number of rock types can be seen here. Commemorating those who died in the Second World War, the memorial is made of white granite. A quartz stone can be seen at the foot of the steps that lead up to the Mold Field of Remembrance plaque. The plaque itself is made of marble. Looking across the road you will notice two limestone pillars. How do these pillars compare with the sandstone wall of the nearby building?

9 Cerflun Daniel Owen

Yn Yr Wyddgrug y ganed Daniel Owen (1836-95), yr awdur cyntaf i wireddu potensial y nofel yn y Gymraeg. Diddorol yw'r defnydd o garreg leol i goffâu gw'r lleol. Mae'r rhan uchaf ac isaf o galchfaen, tra bod y canol yn dywodfaen. Sylwch sut mae'r copor o'r cerflun efydd, a wnaed gan y cerflunydd enwog o Gymro, W.Goscombe John, wedi difaru i lawr gan liwio'r calchfaen yn wyrdd.



Daniel Owen Statue

Mold is the birthplace of Daniel Owen, one of the first and prominent novelists in 19th century Wales. It is interesting to note the use of local stone for a local man. The upper and lower sections are made of limestone, whilst the middle is made of sandstone. Notice how the copper from the bronze statue has run down and coloured the limestone green.

10 Capel Bethesda

Wedi'i godi yn wreiddiol yn 1819 a'i ailadeiladu yn 1863-64, codwyd yr adeilad hardd hwn, megis Banc Lloyds ac Eglwys Blwyf y Santes Fair, o dywodfaen. Mae dau blac ar flaen yr adeilad o ddi-ddordeb arbennig. Marmor ar lechfaen yw'r uchaf, tra bod yr isaf yn farmor ar fasalt (lafa; craig igneaidd) caboledig.



Bethesda Chapel

First erected in 1819 and rebuilt in 1863-4, this fine building, like Lloyds Bank and St. Mary's Parish church is made of sandstone. The two plaques at the front of the building are of particular interest. The top one is marble on slate, whereas the bottom is marble on polished basalt.

11 Llys-yr-Efail

Mae'r plac ar yr adeilad hwn yn ddarn o graig igneaidd fân grisialog. Mae maint y crisialau yn dibynnu ar ba mor gyflym yr oerodd y graig dawdd (magma). Yma, mae'r crisialau'n fach, sy'n golygu i'r magma y ffurfiwyd y graig ohono oeri'n gyflym iawn. Sut mae'r graig hon yn cymharu â chreigiau igneaidd eraill, megis y gwenithfeini bras grisialog, sydd i'w gweld ar y daith? Mae'r magma sy'n ffurfio gwenithfeini yn oeri'n araf iawn gan ganiatáu i grisialau mawr dyfu.



Llys-Yr-Efail

Meaning Blacksmith's Court, this plaque is fine-grained igneous rock. The crystal size here relates to the rate of cooling. The crystals are small, meaning that the molten rock from which the rock formed cooled very quickly. How does this compare with the other igneous rocks seen on the trail such as granites which are coarse? Granites cool slowly allowing the crystals to grow.

Dyma ddiwedd y Llwybr. Gobeithio eich bod wedi mwynhau'r daith a'ch bod wedi dysgu ychydig mwy am ddaear Yr Wyddgrug a pha mor bwysig ydyw i'w warred! Here the Trail ends. We do hope you enjoyed the walk and hopefully you have learnt a little more about the geology of Mold and why it is so important to conserve it!

