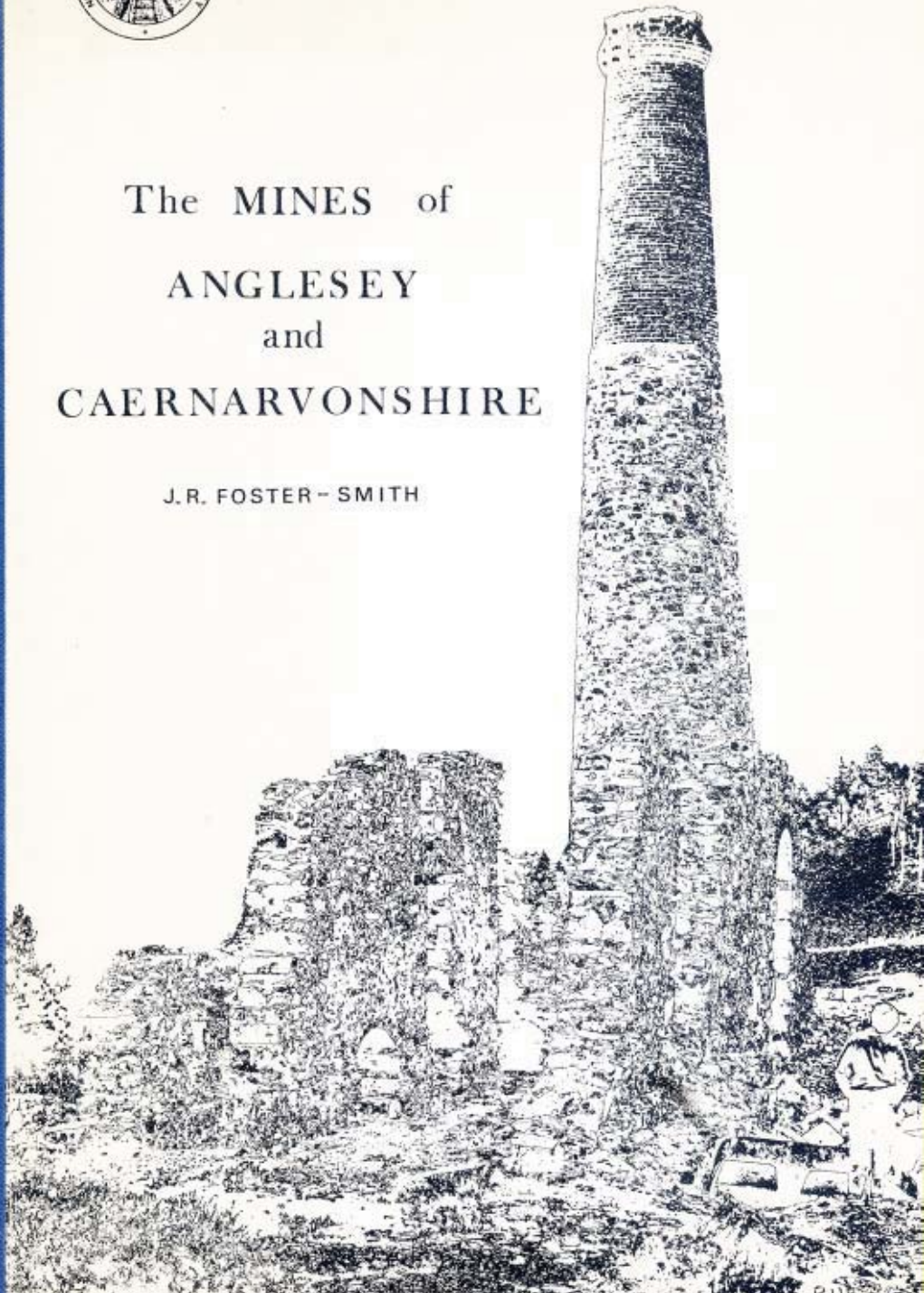




BRITISH MINING No.4.

The MINES of  
ANGLESEY  
and  
CAERNARVONSHIRE

J. R. FOSTER - SMITH



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**THE MINES OF  
ANGLESEY AND CAERNARVONSHIRE**

by

**J.R. FOSTER-SMITH, C.ENG, FGS, FIMM**

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**THE NON-FERROUS METAL MINES OF WALES**  
**THE MINES OF ANGLESEY AND CAERNARVONSHIRE**

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**MAPS**

General maps of Anglesey and Caernarvonshire show sites of mines described in the text.

Sketch map of the Llanrwst Mining District.

Maps kindly prepared by M.C. Gill

**COVER DESIGN**

LLANWRST ENGINE HOUSE  
by R.H. Bird

**PUBLISHER'S NOTE**

To avoid confusion which may arise consequent upon the title alteration of Society publications, it should be noted that this and subsequent volumes in the series which may be published by the Society, will now be treated as separate monographs under the general title 'British Mining'. Discontinuity of numeration should not therefore be regarded as indicative of missing or duplicated parts of the work.

### **AUTHOR'S NOTE**

This monograph is one part of a larger work which sets out to make a complete survey of the sites and nature of all the presently identifiable non-ferrous metal mines and trials in Wales. Each monograph covers a county of major importance or a group of counties of lesser importance from the point of view of metal mining. \*

The purpose of the work is to put on record the locations of and some brief notes upon as many non-ferrous metal mines as it has been possible to trace during a long period of research into the industry. It is hoped that the work may be found useful, not only to students of industrial history, but also to the geologist or mining engineer who may have occasion to investigate the mines of Wales.

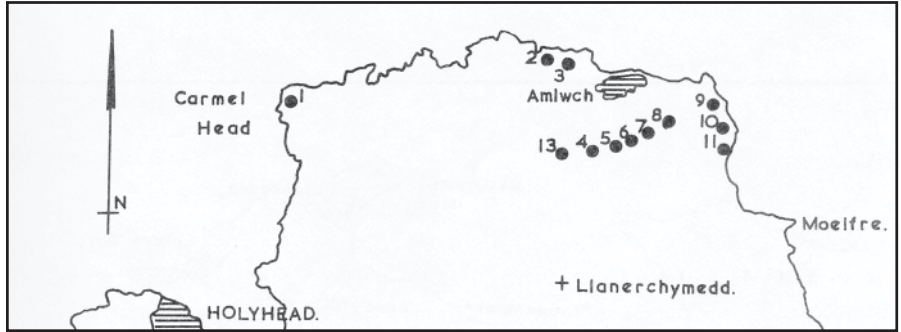
Many of the smaller mines and trials have now been almost or entirely obliterated and their location is no simple task. An exhaustive study of old records and large scale maps has been necessary, combined with a physical examination of the ground wherever possible, in order to locate the sites known to exist, and to compile the information given herein. Even so it has not been possible to locate all the sites of which there are records. However what has been done may save future researchers much time and trouble.

In a work of this nature it is quite impossible to claim that the data given is original and it has been necessary to draw freely upon all the published sources of information. These are listed in the bibliographies for each section.

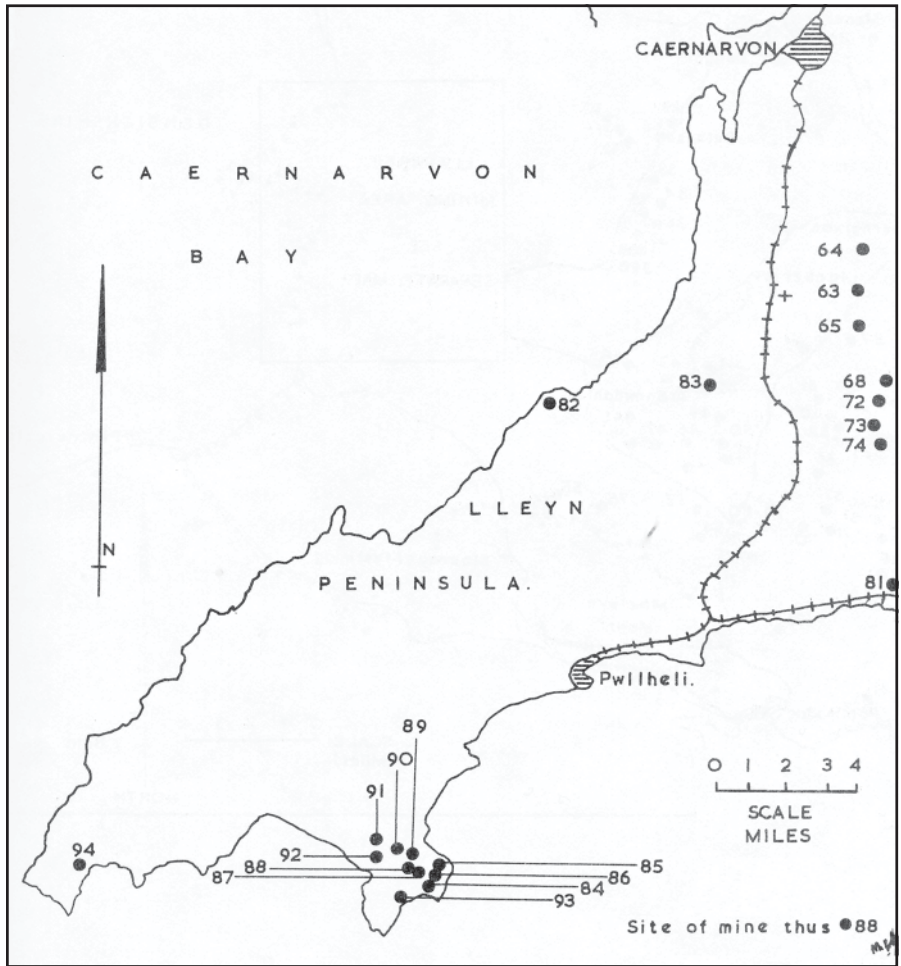
Neither can it be claimed that all the information given in this work is indisputably accurate or complete, since in so comprehensive a work some mistakes are inevitable, but every care has been taken to avoid including incorrect data. Nevertheless corrections or amendments will always be welcomed by the author \*

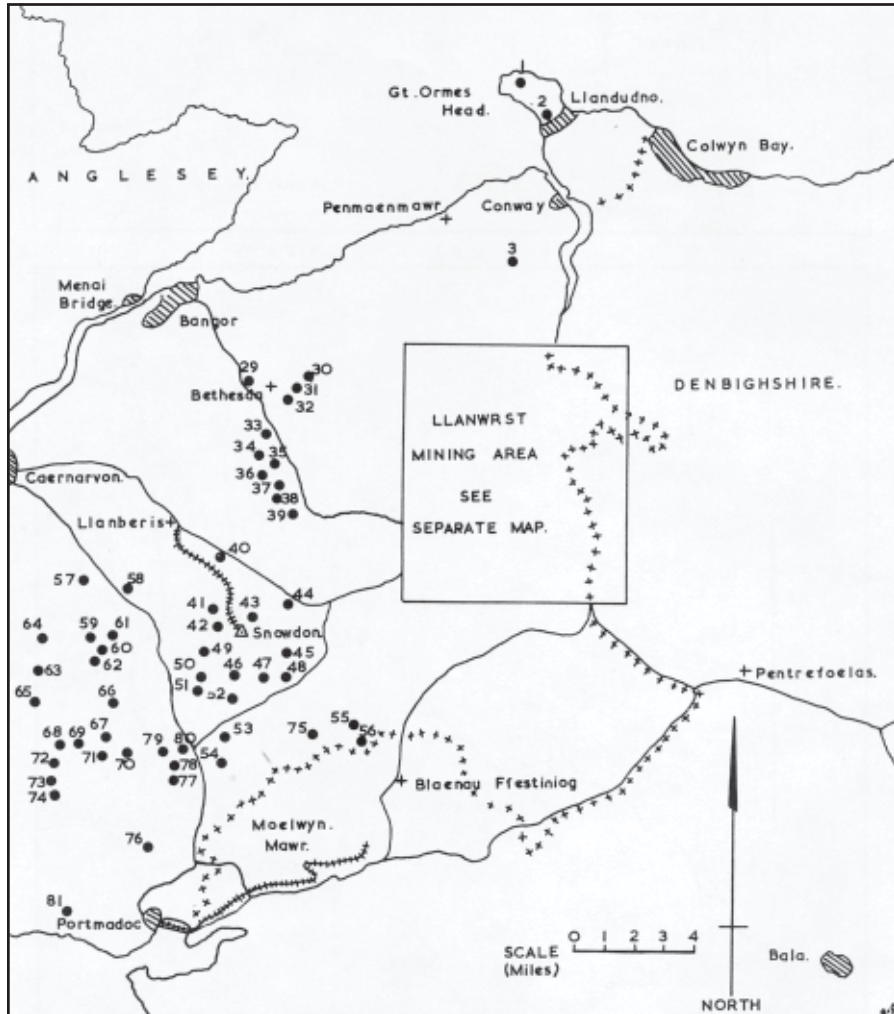
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\* Publications concerning the counties of Denbigh and Flint have already been published by the Society.



**NORTHERN ANGLESEY**





## **THE MINES OF ANGLESEY**

Non-ferrous metal mining in Anglesey has been an important industry, probably since ancient times, due entirely to the large deposits of copper ore at Parys Mountain, Amlwch. Apart from these mines activity has been confined to a few scattered trials for copper and lead ores, most of which are quite unimportant.

Parys Mountain is a name well-known for its association with copper mining and at one time the mines there were the largest producers of copper ore in the world. The deposits occur as disseminations of chalcopyrite and pyrite in country rocks of Silurian and Ordovician age and lie close to a major thrust line, by which the Pre-Cambrian and Ordovician rocks are thrust over the Ordovician and Silurian strata. The deposits are large, though apparently the overall grade is low. Local pockets of what is known as 'Bluestone' occur, in which lead and zinc ores are associated with the chalcopyrite and pyrite.

Mining in the Parys Mountain area was at a maximum during the eighteenth century and diminished in importance during the nineteenth century until, by the beginning of the present century it has ceased to be of any practical importance. The production of copper from the area had by then been confined to the deposition of the metal from copper-bearing waters from the adit level.

An attempt to re-investigate the Parys Mountain mines with a view to further investigation in depth failed to find the prospects encouraging enough to warrant the necessary large expenditure for full development. The trials were made in 1953, but the area has been abandoned since that time.\*

Apart from these major mines there are several scattered trials for copper, lead and zinc ores. All these trials occur in either Pre-Cambrian or Ordovician rocks in the North part of the island and none of them appear to have achieved very much success. Reports of further trials than those recorded here have been seen, but the location of these have not been discovered during this investigation. Some notes on the latter will be found at the end of this section.

There are no known areas which could be indicated as favourable for further development apart from the possibilities remaining in the Parys Mountain mines, which are themselves highly speculative and would in any case be costly to carry out.

### Output from Anglesey Mines

The output recorded from mines in Anglesey between 1845 and 1940, is as follows:

Lead concentrates	1,749	long tons
Zinc concentrates	18,419	“ “
Copper concentrates (computed)	700,000	“ “
Copper metal produced between 1773 and 1920 - approximate figure only	88,522	“ “

\* Since these notes were compiled it is understood that a further attempt is being made to explore and exploit the Parys Mountain mines, but no details of this operation are known.

[1]

### ANGLESEY - DETAILS OF THE MINES

1. **TALDRWST** also known as **TALDRWS**  
Llanfairynghornwy Ph. SH/296927

This small mine was more in the nature of a trial than a fully developed mine and was made in search of copper ore. The vein is probably associated with the line of the Carme I Head thrust and occurs in rocks of Ordovician age. It is believed that some copper ore was produced, but no figures of output have been seen and the mine does not appear to have achieved any real success.

2. **MYNYDD PANT-Y-GASEG**  
Amlwch Ph. SH/412945

A trial shaft was sunk here in Pre-Cambrian rocks in search of copper ore. No details of the workings are known, but this is probably one of the trial workings referred to in a letter printed in the Mining Journal of 14 March 1863, as being carried out at that time. The trial was evidently not very successful.

Ref: MJ. 14 March 1863

3. **BULL BAY** also known as **RHIANFA**  
Amlwch Ph. SH/421942

A small mine or trial working was in progress here in 1863, in search of copper ore. A letter published in the Mining Journal of 14 March 1863 refers to the workings in this area. The report speaks of veins of some strength which are stated to occur in 'clay-slate', (a Cornish term) and to contain good copper and lead ores and to be intersected by some cross veins, striking North and South, which are supposed to be some of the same cross veins as were



found in the Parys Mountain mines, further to the South. The trials were presumably not very successful, since no large scale mining seems to have followed here. No other references to these workings have been seen, nor is there any record of output .

Ref. MJ 14 March 1863

**4. MORFA-DU**  
Amlwch Ph. SH/431900

The Western end of the Parys Mountain orebodies were worked at this mine. These orebodies occur in rocks of Ordovician age and lie below and on the South side of the Carmel Head thrust. The orebodies consist of 'Bluestone' impregnations of the country rock along the East and West striking fissures. This 'Bluestone' ore consists of a fine-grained mixture of galena, sphalerite, chalcopryrite and pyrite. No true vein is said to occur and the ore bodies were found to be somewhat ill-defined, the mineralisation dying out gradually at the fringes of the deposits.

The workings at this mine are supposed to be fairly shallow and the mine was active from 1881 to 1904, during which time 487 tons of lead metal [2] were produced and 5,783 tons of ore containing an average of 28% zinc.

Refs: SR.23, pp 81-5. SR30, pp 33,35. WM. p 319. FJN. pp 20,60. TMT. pp 201, 214-218.

**5. PARYS**

**6. MONA**

Amlwch Ph. Parys - SH/440903 (to centre) Mona - SH/444904 (to centre).

These large mines are considered together here for convenience. They are certainly very ancient and the group as a whole was probably the largest metal mine in Wales; it was certainly the largest and most successful copper mining complex.

It is not proposed that a comprehensive description of the history or working of the mines shall be given here, since they are well documented elsewhere. Instead therefore a brief sketch is given here together with references to further descriptions, published elsewhere.

The great orebody, or series of orebodies, worked at these mines, consist of masses of mineralised country rock which occur in strata of Silurian and Ordovician age and in association with a felsite dyke, all of which have been mineralised to some degree. The mineralised zone as proved to date extends along its axis of 'strike' for more than 5,000 feet and the zone of ore bodies reaches a maximum width of more than 1,500 feet. These orebodies have been worked both opencut and underground and the vertical extent of the

## ALPHABETICAL LIST OF MINES

An asterisk before the name of a mine in this list indicates that the name is an alternative for one listed elsewhere in the list.

	<b>County Number</b>	<b>Page</b>
ABERLLYN	26	19
AFON-GOCH	77	32
ASSHETON	86	34
BENALLT	59	27
BLAEN-Y-NANT	39	22
BLAEN-Y-PENNANT	71	31
BODGYNYDD	20	17
BRITANNIA (or CWMDYLE ROCK AND GREEN LAKE, GLASLYN, SNOWDON COPPER, or CWM DYLI)	43	23
BRON-Y-CADAIR (or PORTMADOC)	81	33
BRYN EISTEDDFOD	19	16
BRYNFELIN (or BRYN-Y-FELIN)	80	33
BWLCH COLEU	78	33
BWLCH-Y-TOCYN	88	35
CAE-COCH (or RHIBO)	5	11
CAERHEGLE (or CAERHEGLA)	8	12
CEUNANT	34	21
CYM	84	34
CLOGWYN-BOETH	49	25
CLOGWYN-COCH	42	23
CLYNNOG	83	34
COED-GWYDYR	6	12
* COED-MAWR-POOL (see POOL)	25	19
COED-Y-DINAS	29	20
CRAIG-Y-GARN	73	32
CWM BUAL	38	22
CWM BYCHAN	54	26
CWM CIPRWTH	68	30
CWMDWYFOR	66	29
* CWMDYLE ROCK AND GREEN LAKE (see BRITANNIA)	40	22
* CWM DYLI (see BRITANNIA)	40	22
CWM GRAIANOG	36	22
CWM LLEFRITH (or GLISTENING VALLEY or MOEL HEBOG)	70	31
* CWM-MAWR (see POOL)	25	19
CYFFTY (or PENCRAIG)	25	19
* D'ERESEY MOUNTAIN (see PARC)	18	15

	County Number	Page
DEUCOCH	90	35
DINAS (or DINAS GREAT CONSOLS or DINAS GREAT COPPER)	69	30
DOLAWEN	33	21
DORLAN-DU	51	25
DRWS-Y-COED	61	28

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FFRIDD (or FREETH)	24	18
FFRITH-SIAN (or TY'N-YR-ARDD)	15	14
GALLT-Y-MAWN	30	20
GARN EDD-GOCH	65	29
GELLILYDAN	7	12
GILFACH	72	31
* GLASLYN (see BRITANNIA)	40	22
* GLISTENING VALLEY (see CWM LLEFRITH)	70	31
GLYN	28	20
GORLAN	22	17
GWAITH	35	21
* GWAYNLLIFION (see LLANRWST)	21	17
GWERNOR	63	29
* GWYDYR PARK CONSOLS (see PARC)	18	15
GYRN-WIGAU	31	20
HAFNA (or RHAFNA)	17	15
HAFNANT	1	10
HAFOD-Y-LLAN	47	24
HENDREDDU	74	32
KLONDYKE	10	13
LLANBERIS	40	22
LLANDUDNO	2	10
LLANRHYCHWYN	14	14
LLANRWST (or GWAYNLLIFION)	21	17
LLEDWIGAN	9	13
LLIWEDD	45	24
LLYN-DU	76	32
LLYN-DU'R-ARDDU	41	23
MAES CARADOC	37	22
MOEL FLEIDDIAU	55	26
* MOEL HEOG (see CWM LLEFRITH)	70	31
MOEL LEFN	67	30

	<b>County No.</b>	<b>Page</b>
MOEL LLEDR	56	27
MOUNTAIN LODD	62	28
NANTMOR	75	32
NEW PANDORA (WILLOUGHBY, WILLOUGHBY FOXDALE, or WELSH FOXDALE)	16	14
PANT-GWYN	91	36
PANT-Y-CARW	11	13
PAR ED-MAWR	93	36
PARC (CWYDYR PARK CONSOLS, or D'ERESBY MOUNTAIN)	18	15
* PENCRAIG (see CYFFTY)	28	18
PENMAEN-BRITH	48	25
PENRHYN (PENRHYN-DU or PENRHYN MAWR)	85	
PEN-Y-PASS	41	23
PENYRALLT	27	20

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POMPREN	94	36
POOL (COED-MAWR-POOL or CWM-MAWR)	25	19
* PORTMADOC (see BRON -Y-GADAIR)	81	33
PORT NIGEL (or PORTH NEIGWL)	92	36
* PYLLAU-COCHION (see TRECASTELL)	3	11
* RED PITS (see TRECASTELL)	3	11
* RHAFNA (see HAFNA)	17	15
* RHIBO (see CAE-COCH)	5	11
* SNOWDON COPPER (see BRITANNIA)	40	22
* SYMDDE-DYLLUAN (see TAL-Y-SARN)	60	27
SYGUN (or SYGUN-FAWR)	53	26
TAL-Y-SARN (or SYMDDE-DYLLUAM)	60	27
* TAMOW (see TY-MAWR)	64	29
TAN-Y-GARREG	58	27
TAI-ISAF-ARDDA	4	11
TAN-Y-GARTH	32	21
TAN-Y-BWLCH (or TAN-YR-ALLT)	89	35
TAN-YR-EGLWYS	13	14
TERFYN	52	25
TRECASTELL (or PYLLAU-COCHION or RED PITS)	3	11
TRWYN-Y-TAL	82	33
TYDDYN-BACH	57	27
TY~AWR (or TAMOW)	64	29
TY'N-TWLL	12	13
* TY'N-YR-ARDD (see FFRITH-SIAN)	15	14

	<b>County No.</b>	<b>Page</b>
* WELSH FOXDALE (see NEW PANDORA)	16	14
WEST ASSHETON	87	35
* WILLOUGHBY (see NEW PANOORA)	16	14
Y-DDUALLT	79	33
Y-GEUALLT	46	24
Y-PENNANT	50	25

[39]

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The initials in brackets before each entry below refer to the code used in footnotes in the text.

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