

**CWM TWRCH
SITE OF SPECIAL SCIENTIFIC INTEREST**



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YOUR SPECIAL SITE AND ITS FUTURE

‘Your Special Site and its Future’ is part of our commitment to improve the way we work with Site of Special Scientific Interest (SSSI) owners and occupiers. In it, we explain what is special about the geology on your site, and what care is needed to look after its geology into the future.

All SSSIs are considered to be of national importance and we recognise the crucial role that owners and occupiers play in their management and protection. We need you to share your views and knowledge of this site with us, to help safeguard it.

We hope that you will find ‘Your Special Site and its Future’ interesting and helpful. Please contact us if there is anything about the site and its management that you would like to discuss.

What is ‘special’ about the geology at Cwm Twrch SSSI?

Cwm Twrch has one special feature:

- The oldest two divisions of the Westphalian (Upper Carboniferous) sedimentary rocks exposed in river bed and banks

Cwm Twrch SSSI is of national and international importance for a sequence of rocks that is of Westphalian A and B (Upper Carboniferous) age and was deposited approximately 320 million years ago. These rocks form part of the Productive Coal Formation and include non-marine mudstones, sandstones and coal bands, together with a thin band of marine shales. The latter unit has yielded a variety of marine fossils, including bivalves, gastropods, brachiopods and cephalopods, which allow geologists to correlate these rocks with other sequences of a similar age exposed elsewhere in northern Europe.

What do we want Cwm Twrch SSSI to look like?

The following is a description of how we would like to see the feature at Cwm Twrch SSSI:

Our aims for this site will be focussed on maintaining the current level and continuity of rock exposure at the site, as well as keeping the rock sequences visible and accessible. This will thereby ensure that the exposed rocks at Cwm Twrch will continue to be one of the best localities in Wales for the study of this important sequence of Carboniferous sedimentary rocks.

What management is needed on Cwm Twrch SSSI and why?

Cwm Twrch SSSI is an excellent place for the study of rock sequences representing the Westphalian A and B interval of geological time, and sites such as this are vital for furthering our understanding of geological science and Wales’ Earth heritage. However, it will only remain so if the necessary management continues and CCW’s priority is to work with you to ensure that this management is carried out.

What does this mean in practice?

There are a number of different factors that could damage the special feature at Cwm Twrch SSSI if they are not properly managed. These are the ones we regard as most important:

- **Accessibility**
Students and researchers need access to study the geological structures exposed in the river bed and banks. However, public rights of way do not lead all the way to the site, and access is therefore entirely at the discretion of the landowners.
- **Fossil collecting**
Anyone seeking permission from the owners to visit the site for geological study should also be asked to contact CCW so that their scientific aims can be

reviewed and terms of the permission can be agreed. This should ensure that the results of any research are added to site documentation maintained by CCW.

In addition, some management may become essential to conserve the special feature and maintain it in its current condition. This may include the removal of sediments that might have been washed downstream, or vegetation or fallen trees, which may obscure the important geological structures. However, these works would only be carried following consultation with the landowners.

Finally

Our knowledge of geology is continually improving and sites such as this are vital in that process. It is possible that new issues may arise in the future, whilst other issues may disappear. This statement is written with the best information we have now, but may have to change in the future as our understanding improves.

If you would like to discuss any aspect of your SSSI, or have any concerns about your SSSI, please contact your local CCW office.

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