

---

# Hope Bowdler Road Section

[SO 474 924]

## Introduction

This site shows the unconformable relationship between the base of the Harnage Shale Formation and the underlying Uriconian Volcanic Group of Precambrian age. The basal Caradoc rocks here are younger than elsewhere in the type Caradoc area and the locality is thus important in demonstrating the marked diachronism of the base of the series in south Shropshire.

The Caradoc Harnage Shale Formation in the Hope Bowdler Road Section has a conglomeratic base and unconformably overlies Precambrian rocks. In the context of other outcrops in the area (see Greig *et al.*, 1968, p. 123), the irregular nature of this unconformity surface, with fissures up to 15 cm wide, can be deduced.

## Description

This small roadside cutting, about 200 m west of the church at Hope Bowdler ('12' in (Figure 10.1)), exposes 30 cm of pebbly conglomerate overlying tuffs of the Precambrian Uriconian Volcanic Complex (Figure 10.14). The conglomerate is overlain by shales of the Harnage Shale Formation that contain a rich shelly fauna indicative of the lower part of the Harnagian Substage of the Burrellian Stage. At Upper House [SO 475 926], some 60 cm of conglomerate overlie the Uriconian rocks (Greig *et al.*, 1968, pl. 7C), and in the quarry on Hazier Hill [SO 463 925] neptunian dykes of sandy Harnage Shale in the Uriconian Group also contain a Harnagian fauna (Strachan *et al.*, 1948).

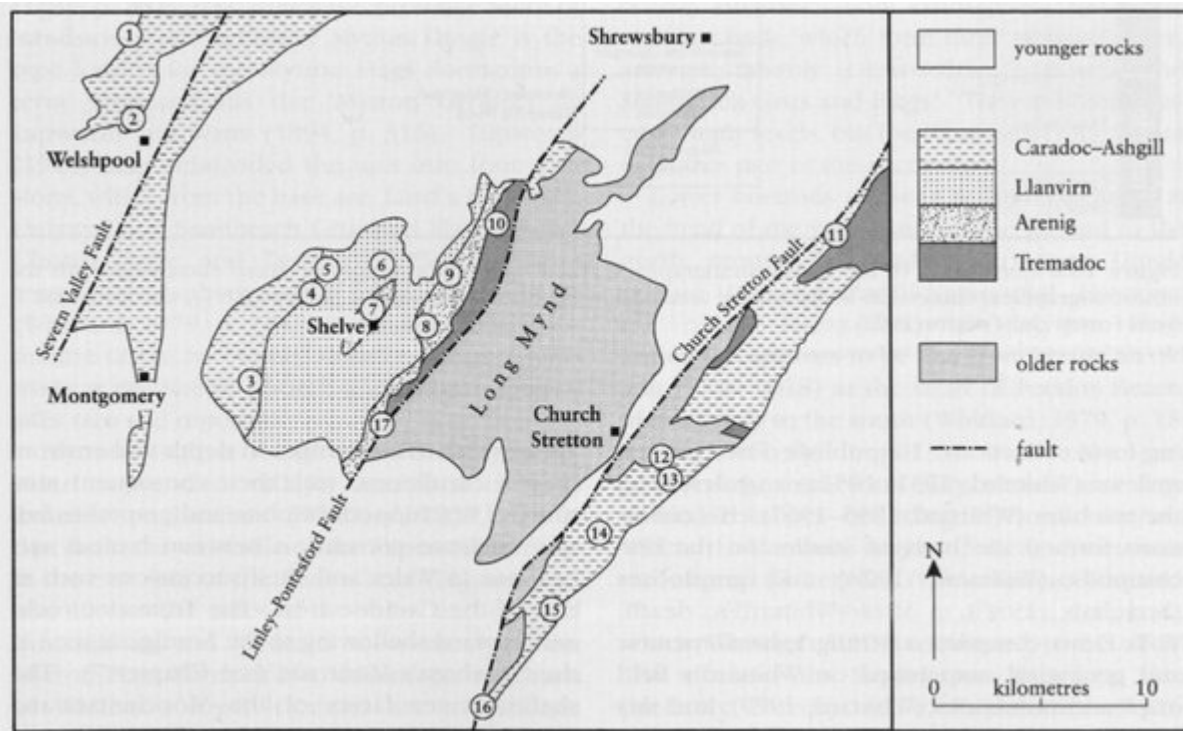
## Interpretation

The shelly fauna from the Harnage Shale in the road section and elsewhere indicates that the basal Caradoc rocks in the Hope Bowdler area are Harnagian, and therefore younger than the Costonian basal rocks elsewhere in the type Caradoc area of Shropshire (see the site report for Coston Farm). Thus the basal Caradoc transgression was demonstrably diachronous over an irregular surface of Precambrian, Cambrian and lower Ordovician (Tremadoc) rocks.

## Conclusions

This site shows evidence of the transgression of the sea during the early Caradoc over the eroded surface of much older rocks. Fossils from the beds above the unconformity indicate that this drowning took place at a later date than elsewhere in south Shropshire.

## [References](#)



(Figure 10.1) Map showing the distribution of Ordovician rocks in south Shropshire and eastern central Wales, from British Geological Survey (1994c). GCR sites as follows: 1, Gwern-y-brain; 2, Trilobite Dingle; 3, Spy Wood and Aldress dingles; 4, Meadowtown; 5, Betton Dingle; 6, Hope Valley; 7, Shelve Church; 8, Bergam Quarry; 9, Mytton Dingle; 10, Granham's Moor (Tremadoc, see Chapter 7); 11, Coundmoor Brook (Harnage); 12, Hope Bowdler; 13, Soudley Quarry; 14, Marshwood; 15, Onny River; 16, Coston Farm; 17, Linley Big Wood (Tremadoc, see Chapter 7).



(Figure 10.14) Roadside section at Hope Bowdler, showing the pebbly lower part of the Harnage Shale Formation resting unconformably on an irregular surface of the Uriconian complex (Precambrian). The hammer head lies at the unconformity. (Photo: J. K. Ingham.)