

## **Siccar Point , Berwickshire**

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You may have seen a photograph, and the diagram drawn by Hutton, but have you visited? Fortunately there are directions at

[www.edinburghgeolsoc.org/huttons-unconformity](http://www.edinburghgeolsoc.org/huttons-unconformity)

or else it will be a long search as it is not signed. The Drysdale vegetable packing company have provided a parking space and infor-



Fig 1, *Siccar Point, south side*

mation boards as well as a walking route. Many pictures are taken from above looking down, but as I visited on a clear dry, and sunny day, I descended on the fixed rope left secured on the cliff top. James Hutton's approach by boat was more sensible. The reward is an amazing close up, not just of the famous section but seeing the unconformity continued to the north and south. This really is one of the most convincing sites, and the only one of three mentioned by Hutton which is still clearly visible.



Fig 2, *Siccar Point, at Rift*

The Greywacke was formed on the floor of the

Iapetus Ocean about 430 million years



Fig 3. *Siccar Point, looking north, note the contrasting dip*

ago and was crushed and uplifted during the Caledonian orogeny. The alternate bands of mudstones and harder bands stand out clearly and dip steeply. There is a very sharp angular and colour junction between the different rocks. The Red sandstone dates from about 380 million years ago. The basal layer is a conglomerate with sub-angular debris of Greywacke in the lowest layer. These small slab like fragments show a marked alignment and are over an uneven eroded surface. This is indeed a classic desert mudflow deposit. There must indeed be a marked time period between the two. The 1788 statement that time had "no vestige of a beginning and no prospect of an end" is very apt. Here you visit the "Eureka" site of a genius.

A couple of small faults are visible. The whole site slopes down to the North Sea and storms keep it clear and open up along joints and faults to give a good view. The images taken looking north and south attempt to give an impression of the site.



Fig 4, *Siccar Point, looking seawards*