

Cornwall Wildlife Trust

Cornwall

Tresayes Quarry is one of over fifty reserves cared for by Cornwall Wildlife Trust. These range in size from very small ones, like Tresayes Quarry, to large areas of moorland. Most are open to the public at all times.

You can find out more about Cornwall Wildlife Trust, how to become a member, and about events, and nature reserves -

why not contact us, or look at our website?
web: www.cornwallwildlifetrust.org.uk

Roche Rock is a Cornish icon - visible for miles.

But **Tresayes Quarry** is a hidden gem.

Roche Rock is owned by the Tregothnan Estate. The quarry is owned by Goonvean but is leased to the Cornwall Wildlife Trust - for one peppercorn a year - as a nature reserve.

Follow the trail and find out more! You can start either at the Rock or the Quarry. And if you want refreshment there is a range of pubs, shops and take-aways in Roche village. Just don't be paying in peppercorns!

Cornwall Wildlife Trust
Five Acres - Alet
Truro - Cornwall
TR4 9DU

To join or for other information
call: **01872 273939**
email: info@cornwt.demon.co.uk
web: www.cornwallwildlifetrust.org.uk

letter written by: John Macadam / Earthwords
designed by: Azwen Design Studio
photographs by: David Chapman, Neil Lindsay, Ben Unwin, John Macadam, Adrian Langdon, Stuart Hutchings, Jamie MacArthur, Paul Naylor, Ian Bennallick, Colin Butler & Alan James
illustration by: Erin Edwards
historic photos: China Clay Country Park, British Geological Survey, Cornwall Record Office
air photo: Cornwall County Council
satellite image: Plymouth Marine Laboratory

This project has received support from ALICE through Delta's Agenda

Cornwall Wildlife Trust

Cornwall

Roche Rock & the Tresayes Trail

(& rocks!)

Protecting Wildlife for the Future

400 million years

of Roche about

400 words & a few pictures!

Around 400 million years ago this was all a shallow sea. Strange creatures lived in Roche! But of course Roche, and Cornwall, and the world looked very different. You would not have been able to recognise today's continents. Some have been made of bits and pieces of earlier continents, and anyway they have drifted all over the place in the last 400 million years.

Sand and mud were eroded off these old continents and dumped on the sea-bed. Then we were in the middle of a slow-speed shunt between Africa and Europe which crumpled the new layers of sand and mud. **Slow speed?** These old continents came together at the stately pace of about 1 centimetre a year. That's about the rate your fingernails grow. But imagine growing your fingernails for a million years - they'd be ten kilometres long: **no need for extensions!**

The crumpled rocks made a mountain chain. Deep beneath the mountains some of the rock melted - and molten blobs popped up (like a 'lava lamp') and then solidified as granite a few kilometres below the ground surface. All sort of other rocks - with strange names - were formed: *pegmatite, gneiss, schist, spotted slate, calciflute, china clay* - and ores of metals like *tin, tungsten, iron, nickel and uranium*. The mountains were worn down - strange reptiles walked the hot dry plains. **Did dinosaurs ramble through Roche?** They'd have been way above our heads! Several thousand metres of rock has been eroded since the dinosaurs roamed.

About 50 million years ago the climate was warm and wet, and probably a lot more feldspar rotted to form *china clay (kaolin)*. In fact the whole of the granite, and the slate around it, was weathered to quite a depth. Then in the **Ice Age** of the last couple of million years rapid erosion stripped off this material to leave tors like Helman Tor and Roche Rock. There were no glaciers here but the conditions changed from arctic - for ten thousands of years - to pleasantly warm, several times. Today we are living in a 'pleasantly warm' time. In arctic times Roche would have been like Siberia today but probably with the odd herd of mammoths.

Tin Ore

Unweathered Granite

Did woolly mammoths once graze where cows and sheep do now?

The last glacial period ended about twelve thousand years ago. Since then we've changed the area a great deal. Cleared the land and farmed. Built houses, churches, chapels, schools and factories. Dug up metal ores, and dug up china clay. **It's all written into the landscape.**

Roche

Roche Rock

St Gomonda Church

Tresayes Chapel

Medieval Fields

Tresayes Quarry

Prosper Tip

Carbis Brickworks

1907

This air photo was taken in 1995 - what changes have taken place since then?

- What changes may take place in the next hundred years?
- Another ten thousand?
- Will it be warmer - or will there be an Ice Age?
- Another few million?

Probably humans will have become extinct by then! What sort of planet will we leave?