## A DIARY OF THE LIZARD TRIP, 13th-15th MAY 2006 Robert Mustow

I soon found 'Henry's Campsite' tucked away in a corner of Lizard. It is a beautiful spot with *Echium pininana* and Torbay Palms lining the access track. I quickly got the tent up and walked to Kynance Cove, where I failed to judge the waves, which were right up to the overhanging serpentine cliff, and had to empty my boots of water and wring my socks out!

Next morning, Saturday, I was woken by the distant sound of the lighthouse foghorn, so I was up in good time to meet the eight others at Kennack Sands (*photograph 1*) where we examined a confusion of intermingled rock types interspersed with dykes. Here there are striped rocks of alternate bands of dark basalt and pale granite, an odd combination presumably caused during the upheaval caused when Gondwana collided with the Lizard. I was intrigued to find that serpentine changes into fluffy asbestos and slippery talc, examples of which we found in the cliffs. In the first hour I already had too much information to remember! If you visit this area you must either buy the essential booklet "Beneath The Skin of the Lizard", available in local shops, or take David Workman with you. I did both.



Photograph 1: Kennack Sands; intrusion into serpentinite has created a thin layer of talc at the interface.

We moved on, in warm sunshine, to Coverack to see the Moho which represents itself as a network of fault lines in the wave-cut platform with serpentine on one side, and gabbro on the other. The tide was now coming in fast so we moved on to Porthellow and walked a mile or so along the cliff to see where huge masses of sediment had slid down into the sea leaving outcrops of huge boulders projecting from the steeply sloping hillside. Down at sea level, where the rocks are exposed, we could see how the stones and boulders in the strata had been stretched, smeared almost, into elongated shapes under huge temperature and pressure.

That evening, we had a lovely meal in the Halzephron at Gunwalloe. There was a bit of mist about on the way back so it is not surprising that, next morning, I was woken early by the foghorn.

As a newcomer to geology, I think Polurrian Bay near Mullion was the most impressive place we visited. Here you could see where two tectonic plates had smashed together (very slowly of course!), the southern continent being made of an enormous mass of ocean floor volcanic rocks - hornblende schist in particular, overlain by unknown hundreds of feet of other rocks - which had risen over, and come to rest against, the Devonian slates. At the interface is a layer, a foot or so thick, looking like a dyke but is actually a breccia, made up of ground-up pieces of both rock types welded together.

Tearing ourselves away, we headed for the Lizard Point where David Workman, our leader and oracle, was delighted to find the beautifully striated boulder of Manof-War gneiss (photograph 2) was still there amongst the rocks by the old lifeboat station. The final visit today was to Kynance Cove to look at the serpentine which is mostly dark green or red here and comes mainly in two types; bastite, which contains large crystals giving it a spotty appearance, and fine grained stripy tremolite. This time, I kept my feet dry!



Photograph 2: Man-O-War Gneiss at Lizard Point

That evening I walked east from the Lizard Point, peered into the 150 foot deep conical hole that is the Lion's Den, and found a new Lifeboat Station at the bottom of the cliff, accessed by a new funicular railway.

The foghorn started later next day, nearer 6am, and it was misty and drizzly most of the morning. I even walked down to the lighthouse to experience the old air-horns but was disappointed to find they have been replaced with a tiny modern electronic one, although it's still deafening if

you stand on the seaward side! The shapely old 'mooing cow' horns do still work and are tested every month.

Today was certainly the most exciting day of the trip as we went to Mullion and boarded a small boat, ably captained by the knowledgeable local coastguard, which took us to Mullion Island, a few minutes offshore. The boat, about the size of a bath-tub, swept in an out and tossed about as we tried to get to grips with the pillow lava whilst at the same time stepping out of the boat without falling in.



Photograph 3: Landing on Mullion Island

Quite how we all managed it I don't know! Climbing up a narrow arch of the lava we picked our way through tree mallows (a bit short to be trees, I thought), past nesting cormorants, between black-back gull's nests, each with three olive green spotty eggs, to the top where we could also see a pair of guillemots. Amongst the volcanic rock were areas of sedimentary rocks, possibly the remains of the seabed through which the pillow lava had extruded itself 350 million years ago.

Back on dry land the foghorn was still going, but during lunch it stopped and the sun came out. I packed up the tent and headed for home. What an interesting weekend! Fine weather, great company, lovely scenery. Many thanks to the organisers, particularly to David Workman for his planning, research and encyclopaedic knowledge.



Photograph 4: Arch of pillow lava

## **ROCKY JOKES**

from the Rockwatch website.
 Rockwatch is a club for young geologists run by the Geologists' Association.



www.rockwatch.org.uk

What do dinosaurs have that no other animals have?

\*\*Baby dinosaurs!\*\*

What do you call a dinosaur as tall as a house, with long sharp teeth and 12 claws on each foot?

Sir!

Where does a Tyranosaurus sit when he comes to stay?

Anywhere he wants to!

How can you tell if there is a dinosaur in bed with you?

By the D on his pyjamas!



Submitted for this Journal by Vicki Griffiths