top third in the water. After death the top would break off to fall horizontally in the sediment, leaving the diamond shaped base to become fossilised in situ. Also found were *Liostrea* species and a few pieces of fossil wood on which oysters were attached. While looking at the cliff and the faults, it was noticed that two Ravens were rolling and tumbling in flight at the top, to be followed by a Peregrine Falcon which dived steeply towards the beach, no doubt hoping for a raven for afternoon tea. Without success, however!



Image 15: Bivalve 'Pinna' in cross section

We returned to the causeway and then walked to the west over the ledges of Southerndown Beds in which were large numbers of small chert pebbles derived from the Carboniferous Limestone as it was eroded away. Above the chert beds are the ledges of Blue Lias limestones and shales in which fossil oysters and ammonites (*Arietites* species?) up to 30 cm in diameter are visible.

We had started off in very unpromising conditions but intrepidly stuck to the itinerary, to be rewarded by sunny weather, excellent exposures and plenty of interesting features, all very clearly pointed out and described by Dr Geriant Owen. Our Chairman at the time, Maurice Tucker passed a vote of thanks to Dr Owen, expressing the gratitude of the members for giving up his time to lead us on a rewarding trip.

BOOK REVIEW by Isabel Buckingham
The Story of the Earth in 25 Rocks
by Donald R. Prothero
Pub Columbia university Press 2018 as hard back or
e book

Donald Prothero taught palaeontology and geology at various institutions in California and has previously written about fossils.

By choosing 25 different rocks he tells the stories associated with their place in the development and understanding of geological ideas theories and

understanding. Some names are familiar such as James Hutton and William Smith, others less so such as James Croll who's C19th work on the earth's elliptical orbit, wobble and albedo was almost forgotten then developed by Milankovitch who survived two World Wars. This is well written and researched although I could quibble about details.

New ideas are not often welcomed and their acceptance can be a long uphill struggle. The problem of how to date meteorites led Patterson to work on lead products and find a very recent increase. The wrath of companies who added lead tetraethyl to car fuel to try and discredit him and it is to the credit of Caltech that he was allowed to continue when his integrity was questioned.

This is a good read if you accept the USA bias. Stories of the individuals and interwoven with the clear explanations of the development of the understanding.

Lulworth Cove Field Trip – April 2017 Graham Hickman

The party gathered in the Lulworth Cove car park, excited by the day ahead and the glorious spring weather. Professor Maurice Tucker, from the University of Bristol and Bath Geological Society, addressed the attendees and described the programme for the day.



Figure 1 – Lulworth Cove Overlook. Maurice described the geological history of the area.

The plan was to spend the morning on the West side of Lulworth Cove and work our way around the bay in the afternoon to Mupe Bay.