

## THE 300 MILLION YEAR WALK, June 17th.

Twenty PNTA members took real advantage of a Covid re-arranged walk date in perfect sunny weather to take a 300 Million Year walk with Chris Evans on Amroth's spectacular western beach.

Chris began by outlining the environments of deposition of the Lower and Middle Coal Measures and why coal and iron patch mining was so important in the area's industrial history. Lt Col John Colby began its mining in co-operation with Lord Milford (Richard Philipps) of Picton Castle at the turn of the 19C. and the part played by coal in allowing mine owners to build such large manor houses across the county eg Colby Lodge, was cited.

We saw through the faults, thrusts and folds how the Pembrokeshire Coalfield was heavily deformed and compressed by plate movements, which made its mining more difficult.

The Upper Carboniferous Coal Measures were well exposed on the western side with the Kilgetty vein being the important seam locally mined at Amroth and Colby. Pembrokeshire anthracite was of good quality, in thin seams and that from Bonville Court mine was favoured by Queen Victoria for use in her Royal Yacht and train. The ten Amroth seams in the section to Wisemans Bridge were named and the importance in coal bed correlation of the ankeritic (ironstone) freshwater shelly limestone marker bed noted. This helped us see the fault movements in the shallow anticline upfold observed in the cliff.

The hummocky ground of the lower clifftop iron patches were seen, as was the faulted overfold. The rounded ironstone nodules in the beds on the rocky foreshore were given some special mention.

The 6500 Year old submerged forest was seen on the beach, dated by its evidence of oak, lime, alder and ash of the Boreal period and its remains of stag and wild ox and the various Mesolithic flint tools. The thin peat and its tree stumps, sitting on the Blue clay were noted and the latter's summer formation was explained, in the pools on interglacial permafrost surfaces.

Stories of the 3 mile Merrixtion tunnel from the beach to the former Kilgetty mine, the 2nd WW DDay exercises on the beach and the planting of mines near Amroth Castle enriched the talk.

Chris was warmly thanked for his efforts.