

Field trip to South Wales

Friday 5th to Tuesday 9th May 2017 (4 nights)

Gareth George will be leading us on our Field Trip Days, and staying with us at the Park Hotel in Tenby. The page numbers/figures refer to his guide book, second edition.

OUTLINE ITINERARY

Friday 5th May (*travel to Tenby*)

Leave Malvern on the coach and head to Cardiff. Stop at the Geological museum for talks, behind the scenes tours and lunch.

Morning, two talks:

Meteorites

New Welsh dinosaur

Afternoon (split into two groups):

Mineral store

Palaeontology store

Continue to Tenby to arrive in good time to check into the Park Hotel.

Dinner 7.30pm

Saturday 6th May (*low tide 10am*)

Breakfast 8am

9.30am Leave hotel and travel to Manorbier Royal Artillery Camp and park near the youth hostel (p.190). Short walk to Skrinkle Haven for view stop (Fig. 8.21) before descending to the beach to examine the Skrinkle Sandstone (Upper ORS) and its transitional contact with the Avon Group (Lower Carboniferous – previously the Lower Limestone Shales). A very good fossil/trace fossil locality and a spectacular natural arch.

Return to the coast path and walk 1 km to the Lydstep Peninsula (p. 192) noting the interesting geomorphology/scenery and the Triassic gash breccia deposits.

If the weather is good, the scenery is spectacular and the trip is OK for non-geologists.

Lunch~1.30pm

Travel to Manorbier and park the coach below the castle (bar food in the Castle Inn or a packed lunch in the car park) **toilet facilities**.

After lunch, walk down to the beach and examine the Lower ORS Freshwater West Formation (p. 183) e.g. fining-upwards cycles, the Castle Point Calcretes, the Townsend Tuff and Priests Nose Tuff.

Walk 1 km eastwards on the cliff path to view well-developed lateral accretions surface in fluvial channel facies at Precipe and Conigar Pit. (***The coast path has a couple of inclines and moderate climbs - total walking distance 2 km***) Return to Tenby to arrive at the hotel by **about 6.30pm. Dinner 7.30pm**

Sunday 7th May (*low tide 11.00 am*)

Breakfast 8am

Travel 18 miles west to the car park at Freshwater West (p.177) ***with toilets***.

Spend 20 mins examining the formation of structures in the small stream crossing the beach (Fig. 3.12), and comparing these with examples from resin peels of similar bedforms. Find and

examine small outcrops of Ordovician shales, Wenlock sandstone and the basal unconformity of the ORS (Freshwater East Formation). Continue up dip noting the Flimston Bay Fault and the Castle Point Calcretes at Little Furzenip. Examine the famous finingupwards meandering fluvial channel facies from the Freshwater West Formation, the Beaconities Bed and the green braided channel facies. Continue toward Great Furzenip to view the Ridgeway Conglomerate and Skrinkle Sandstone. (*Total walking distance 1.5 km along the beach and foreshore, some slippery rocks*)

Lunch~1.30pm

Coach driver to assess whether the small coach can negotiate the bridge on the B4319 for the short-cut to West Angle Bay! If not take the loop road for Angle for a late lunch in the Hibernia Inn.

After lunch, Travel to West Angle Bay (p.200) car park (*toilets*) to examine the fossil assemblages and major /minor Armorican folding in the Lower Carboniferous Avon Group. (*Total walking distance 0.75 km along sandy beach and rock platform*) Return to hotel by **about 6.30pm. Dinner 7.30pm**

Monday 8th May (*low tide 12.00 am*)

Breakfast 8am

Walk from the hotel to South Beach, Tenby, to begin a traverse in the Carboniferous Limestone across the Tenby Anticline to Castle Hill. Lots of shelf-sea fossil localities and a very good exposure of the lagoonal Caswell Bay Mudstone (p. 201-204). Continue to North Beach to analyse the complex structure of the Namurian strata exposed on the foreshore and in the cliffs. Continue to First Point to look at the Telpyn Point Sandstone, an excellent example of an incised valley fill with its sequence boundary well exposed along the base of a tight syncline (Fig. 8.35). (*Total walking 1.5 km along sandy beach*)

Lunch~1pm

Either fish & chips in Tenby or pick up the coach and travel north through Saundersfoot and on to Amroth to the New Inn for 1.30pm.

After lunch

Walk along the beach east to the type locality of the Telpyn Point Sandstone. If the tide is low enough continue beyond the point to the large cliff fall to examine the *Gastrioceras cancellatum* Marine Band and its underlying forced-regressive sandbody (Fig. 8.43). Work back along the cliff section noting the facies in the incised valley fill and the overlying *G. subcrenatum* Marine Band. In the overlying Coal Measures you will see the Amroth 'slump sheet' (Fig. 8.46), the Amroth Freshwater Limestone, classic cyclic sedimentation and very complex Armorican folding and faulting (Figs 8.47, 8.48) (*Walking distance about 2 km*) On the return journey stop at Saundersfoot to see the famous Ladies Cave anticline (Fig.8.51). Arrive back at the hotel by **about 6.30pm.**

Dinner 7.30pm

Tuesday 9th May

Breakfast 8am

Board the coach for the homeward journey.

Stop at Laugharne, 5 miles south of St Clears. This pretty village is well-known for its association with Dylan Thomas. Park by the castle and walk along the path to Dylan's Boathouse and examine outcrops of ORS cycles and *Beaconities* burrows in the low cliffs (p.185, Fig. 8.15).