GAC-MAC 2014: Field Guide Summary

Sedimentological, Structural and Paleontological Highlights of the Carboniferous Maritimes Basin in Southern New Brunswick

GAC–MAC Fredericton 2014, post-meeting field trip

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FIELD TRIP OBJECTIVES
Over three days, this excursion will offer participants the opportunity to visit spectacular Carboniferous outcrops of palaeontologic, sedimentologic and structural interest in southern New Brunswick. The Norton fossil forest (Fig. 1) contains upright tree trunks smaller, but considerably older than at Joggins. Near Sussex, soft-sediment deformation (slumping) of shale and oil shale is visible over several magnitudes, with these strata overlain by coarsening upward lake shoreface sandstone. At Albert Mines, solid bitumen (Albertite) is abundant adjacent to abandoned mine shafts and fossil fish may be excavated with a bit of luck. Thick beds of often imbricate alluvial fan conglomerate form the ‘flower pots’ at Hopewell Cape (Fig. 2). Salt diapirism (Fig. 3) has folded and faulted over a kilometre thickness of non-marine strata on the Maringouin peninsula.
ADDITIONAL INFORMATION
The trip will depart UNB on the Saturday morning of May 24th and returns to Fredericton on May 26th. Although this excursion will visit accessible roadside exposures, there will be significant walking along beaches (partly over boulders, and approximately 200 stairs), including one traverse 6 km (round trip) in length. Due to uneven terrain and unpredictable weather, rugged footwear and rain gear are highly recommended. Two night’s accommodation in Moncton and meals will be included in the field trip registration fee.

Figure 2. Flower pots at Hopewell Cape, New Brunswick.

Figure 3. Outcropping deformed gypsum associated with salt diapirism, Maringouin peninsula, New Brunswick.