

Lothian & Borders **RIGS** REGIONALLY IMPORTANT GEOLOGICAL SITES GROUP

EAST LOTHIAN GEOLOGICAL HERITAGE AND LANDSCAPE

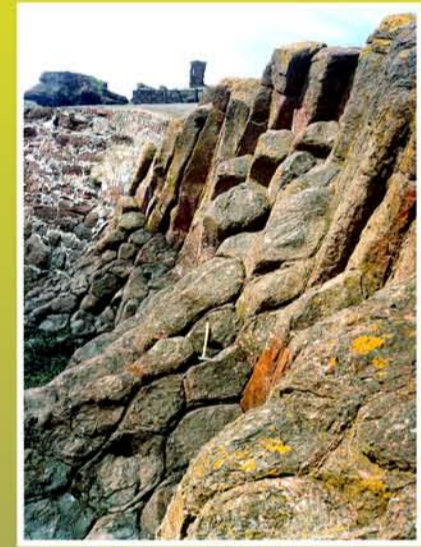
East Lothian is a county of striking landscape and geology with beautiful stretches of coastal and country scenery in which a wide variety of Palaeozoic sedimentary and volcanic rocks are splendidly exposed and displayed. To the south the older Silurian and Ordovician sedimentary rocks of the Lammermuir Hills, some 450 to 500 million year old, dominate a gentler and undulating glaciated plain to the north of softer Carboniferous and Devonian strata, some 300 to 400 million year old, in which more enduring volcanic lavas and intrusions add splendidly to an outstanding landscape.



Lower Carboniferous volcanic (basalt) columnar lava - The Battery, Dunbar Harbour.



The Garleton Hills, a mass of hard volcanic lavas, with Traprain Law (a volcanic intrusion) and the older Lammermuir Hills in the far background, standing above the softer glaciated Lower Carboniferous sedimentary rocks.



A vertical volcanic (dolerite) dyke cutting Lower Devonian conglomerate - Fairy Castle, Back Water, near Oldhamstocks.



The Bass Rock: a spectacular Lower Carboniferous volcanic (trachyte) plug - opposite North Berwick.



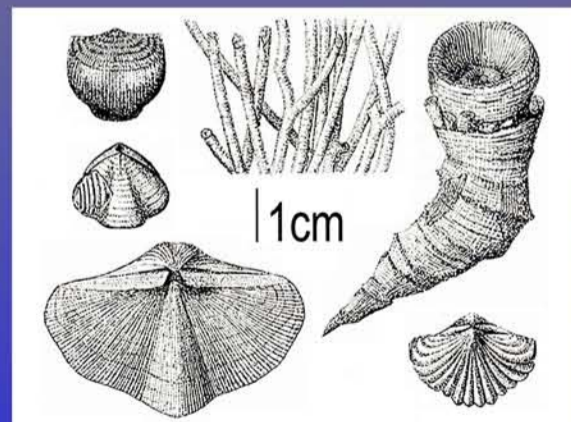
A recent valley cut in Lower Devonian, 400 million year old, Great Conglomerate - Back Water, near Oldhamstocks.



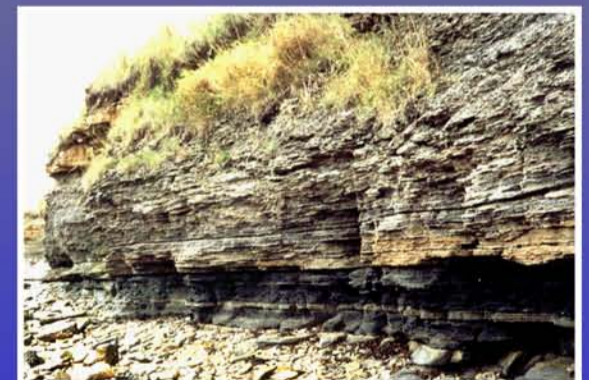
Isle of Fidra: a Lower Carboniferous volcanic (basalt) sill - opposite Yellow Craig, Dirleton.



Potholes showing sites of trees, Lower Carboniferous, 335 million year old, Middle Longcraig Limestone - Catcraig, near Dunbar.



Typical Lower Carboniferous tropical marine shells and corals common in the limestones exposed at Catcraig and Kilspindie.



Lower Carboniferous upward-coarsening rocks, from fine marine mudstone below to coarse cross-bedded fluvial sandstone above - Kilspindie, near Aberlady.



Our Group exists to extend public awareness of our outstandingly rich geological heritage, and to conserve significant sites. Find out more by contacting: Lothian & Borders RIGS at The British Geological Survey, West Mains Road, Edinburgh EH9 3LA Tel 0131 667 1000 email: labrigs@bgs.ac.uk www.edinburghgeolsoc.org

