

West Runton Geology Walks Glacial deposits

The upper cliffs are composed of tills and outwash and especially well displayed towards Beeston Regis. An ice sheet pushing from the west has folded and thrust the sequence.



Pods of chalk sheared and folded within a dark grey till.



Synclines of sand and till overturned from west to east.

Erratic boulders

Ice streams have carried rocks from distant places and deposited them in North Norfolk. So the beach has a rich variety of rocks and minerals from Scotland, northern England and Scandinavia. Some of these bear the scars of their travel, being faceted, striated and polished.



Rhomb porphyry from Oslofjord



Sharman Cutler's Stone

Beach pebbles

Beach material comes from various sources - abundant flint and chalk from the foreshore, erratics from northern Britain derived from glacial deposits in the cliff and exotic pebbles from the crag on the foreshore, brought here by ancient river systems before the Ice Age glaciations disrupted them. Siliceous pebbles dominate - quartz, quartzite, flint, carnelian. Jet and amber also occur in small quantities.



Hertfordshire Puddingstone from the crag.



Banded flint from the Chalk

Background: the edge of the Greenland icesheet; an analogy for North Norfolk in the Anglian glaciation. Torrents of meltwater flow off the glacier. An ice cliff 50-100m high is melting back but sometimes surges forward. Pro-glacial streams and lakes are choked with outwash sands, gravels and silts.

See the Geology Fieldguide to North Norfolk at www.norfolk.org.uk © Martin Warren 2012. Also, visit the Poppyland Brewery, 46 West St., Cromer