

the ice over Cambridge Bay has been estimated to have been at least 2,000 feet. Evidence of glaciation is obtained from the distribution of erratics, and glacial striæ, especially glacial deposition, including eskers and moraines.

The last direction of movement of the ice can be interpreted by glacial striæ. These scratches in the rock surface of the mainland coast indicate that ice pushed to the northwest. On Victoria Island the recorded striæ point westward and southward suggesting a final centre of dispersal on the Island itself.

Since the melting of the ice-cap of glacial times, the whole Arctic has slowly risen out of the sea. This rise has been recorded by emergent beachlines containing fossil marine shells. In some places these gravel ridges are found as high as 500 to 600 feet above the present sea-level. Many of the present-day coasts, and especially the low coasts of sedimentary rock, are characterized by rows of ancient beachlines rising successively higher inland.

The slow emergence may still be continuing. At Cambridge Bay, a shoal reported by the explorer Collinson in 1852, is now a small islet above water. The rise, in this case, has amounted to about five feet in 100 years. Further evidence of deeper water in the Western Arctic is found in the ancient whalebone houses built by Eskimos around King William Island almost 1,000 years ago. The seas in that area are now too shallow for large whales.

Topography.—Topography in the Western Arctic is characterized by combinations of low, level, grassy plains and rounded, barren, rugged hills. There are no mountainous regions; even the rough hilly country does not exceed 2,000 feet in elevation. The highest elevations are found on western Victoria Island and southern Banks Island. The mainland coast from Yukon Territory to Boothia Peninsula is mainly low and flat, but elsewhere rises abruptly from the water to a height of a few hundred feet.

Along the Yukon coast a low tundra strip about 10 miles wide fronts the rugged Richardson and Buckland Ranges. Numerous small streams cross the rolling plain, and lakes dot its surface. The Mackenzie Delta region and the coast eastward to Baillie Island are very low and swampy. Innumerable small lakes, cut off from the sea by strips of beaches, cover the coastal regions, and shallows extend offshore. A sharp bluff rises along the east side of the Mackenzie Delta, beyond which many small conical hills, called "pingos", are found near Port Brabant (Tuktoyaktuk). The inland country to the west is gently rolling tundra, with numerous lakes filling the depressions in the permanently frozen ground.

The coast east of Baillie Island has steep bluffs rising about 200 feet above the water. The Smoking Mountains along the west side of Franklin Bay are steep hills of about 500 feet altitude. South of Darnley Bay, hills rise to about 1,000 feet and appear more rugged on the coastal side. These hills are actually the eroded front of the Precambrian plateau facing towards the sea: they have very little relief on the south side. The lake-dotted country inland from Horton and Anderson Rivers is a rolling tundra with few major topographic features.

Between Pearce Point and Stapylton Bay the coast is straight and in many places lined with low cliffs of 50 to 200 feet. In the low sections elevations increase inland in a series of terraces to a rolling interior plateau where altitudes average about 1,000 feet. Tundra vegetation of grasses, sedges and mosses is fairly abundant over the plateau. The coast around Bernard Harbour is flat, rising in series of former beachlines to a rolling grassy interior. Gravel beaches are the main topographic features.