wind. Finally, a strong off-shore wind will move the ice out of the harbour into the shifting mass in the main channels. This harbour break-up occurs in the last half of June or early July along the mainland coast, but may be as late as the middle of July among the Western Arctic Islands.

Similarly, small lakes on the mainland begin to break up towards the end of June, and larger lakes are ice-free by the middle of July. On northern Victoria and Banks Islands, large lakes may still be frozen over early in August.

After the harbour ice has moved out there still remains a period of weeks before navigation is possible along the coasts. The open coast of Beaufort Sea near the Mackenzie River Delta and that south of Amundsen Gulf usually have a strip of open water along the shore by early August. At any time during the summer, however, strong northerly winds may push the heavy floes of Beaufort Sea southward against the coast. Westerly winds may block the harbours and inlets of western Victoria Island throughout July, and may jam Dolphin and Union Strait. In some years this latter Strait has been blocked with ice floes throughout the summer, but this barrier is not common.

By the end of July, Coronation Gulf usually has enough open water for navigation. The floes move about with the winds in the central part of the gulf until they melt. In shallow Queen Maud Gulf the ice remains until the latter part of August before melting away. At any time heavy polar ice from M'Clintock Channel may push southward through Victoria Strait and into Queen Maud Gulf. Simpson Strait, south of King William Island, is too narrow for polar ice to enter so that this strait and the straits to the eastward are open in August.

North of King William Island there is almost no ice-free season, or at best a period of only a few weeks around the first of September. Heavy polar ice from M'Clintock Channel pushes southward throughout the year, and having no outlet, jams into the passages of Victoria, James Ross and Franklin Straits. Only occasional navigation by shallow-draught vessels has been possible off the west coast of Boothia Peninsula, particularly when favourable winds hold the ice off the coast. Peel Channel apparently has pack ice throughout the year, but in some seasons it is loose enough to permit schooner navigation with difficulty.

North of Banks and Victoria Islands heavy polar ice from the Arctic Ocean packs the channels throughout the year and pushes against the coasts. It is possible that the ice loosens slightly by the end of August, but navigation will always be hazardous. Prince of Wales Strait, between Banks and Victoria Islands, has been reported open in late August in some years, and jammed full of floes in other years.

Summary.—The Western Arctic is a treeless region along the north-central and northwestern coast of the mainland of Canada and includes the nearby Arctic Islands. It is underlain chiefly by ancient worn Precambrian rocks on the mainland, whereas sedimentary rock predominates on the islands. Most coasts are characterized by old gravel and disintegrated rock beach-lines which indicate the emergence of the region from the sea since the last Glacial Age. Topography, often dependent on the underlying bedrock, is either rough and rugged in places, or low and flat. Most of the region, owing to the permanently frozen subsoil, is covered with innumerable lakes of all sizes and shapes.

The region has an Arctic climate, in which winters are continuously cold for five or six months, but do not record the extreme minima of the nearby Subarctic Mackenzie Valley. Summers are cool and short in the Western Arctic. Afternoon