

the Arctic islands of Canada, Greenland, and most of the Arctic islands of Europe and Asia. This shelf is most uniformly developed north of Siberia where it is about 500 nautical miles wide; north of North America it surrounds the western islands of the archipelago and extends 50 to 300 nautical miles seaward from the outermost islands.

The floor of the submerged part of this continental margin is nearly flat to gently undulating, with isolated rises and hollows. Most of it has an average slope seaward of about one-half degree, with an abrupt break at the outer edge to the continental slope whose declivity is commonly six degrees or more. From the Alaskan border eastward to the mouth of the Mackenzie River the shelf is shallow and continuous with the coastal plain on the mainland; its outer edge is at a depth of about 64 m and about 40 nautical miles offshore. This shelf is continuous with that north of Alaska and Siberia. Near the western edge of the Mackenzie River delta it is indented by the deep Herschel Sea Canyon, whose head comes within 15 nautical miles of the coast. Between Herschel Sea Canyon and Amundsen Gulf, typical continental shelf features are replaced by the submerged portion of the Mackenzie River delta, which forms a great pock-marked undersea plain, most of it less than 55 m deep, up to 75 nautical miles wide and 250 miles long.

North and east of the submerged portion of the Mackenzie River delta, the continental shelf is more deeply submerged than that off the mainland and Alaska. Its gently undulating surface is generally 366 m or more below sea level, and most of the well-defined continental shoulder is over 549 m deep, giving way to the smooth continental slope which extends without significant interruption to the abyssal Canada Basin at about 3 658 m. The deeply submerged continental shelf runs along the entire west coast of the Canadian Arctic Archipelago from Banks Island to Greenland. All major channels between the islands — Amundsen Gulf, M'Clure Strait, Prince Gustav Adolf Sea, Peary Channel, Sverdrup Channel and Nansen Sound — have flat floors at about the same depth as the shelf and appear to enter it at grade, but a few local irregularities may be the result of glacial action. The only deep indentation known to cut the continental slope or continental shelf off the archipelago is one sinuous canyon that heads off Robeson Channel at the northeastern end, close to Greenland. Submerged sides of the channels of the archipelago, and slopes from the islands' western shores to the inner edge of the deeply submerged shelf, are marked in many places by a series of steps or terraces.

1.1.4 Islands

Canada's largest islands are in the North in an arctic climate. The northern group extends from the islands in James Bay to Ellesmere Island which reaches 83°07'N. Those in the District of Franklin, north of the mainland of Canada, are generally referred to as the Canadian Arctic Archipelago; those in the extreme north — lying north of 73°30'N — are known as the Queen Elizabeth Islands.

The largest and most important islands on the West Coast are Vancouver Island and the Queen Charlotte Islands, but the coastal waters are studded with many small rocky islands. The largest off the East Coast are the island of Newfoundland, the province of Prince Edward Island, Cape Breton Island of Nova Scotia, Grand Manan and Campobello islands of New Brunswick and Anticosti Island and the Madeleine group of Quebec.

Notable islands of the inland waters include Manitoulin Island, 2 766 km² in area, in Lake Huron, the so-called Thirty Thousand Islands of Georgian Bay and the Thousand Islands in the outlet from Lake Ontario into the St. Lawrence River.

The areas of principal islands by region are given in Table 1.6.

1.1.5 Surveying and mapping

The surveys and mapping branch of the energy, mines and resources department is Canada's major mapping agency. The branch compiles topographic maps, aeronautical charts, thematic maps and base maps of various scales for specialized uses by other agencies to provide geological, aeromagnetic, electoral and land-use information. The geodetic survey division establishes and maintains the national system of control