

5.—Lengths of Principal Rivers and Tributaries—concluded

Drainage Basin and River	Length miles	Drainage Basin and River	Length miles
Flowing into Hudson Bay—concluded		Flowing into the Pacific Ocean—concl.	
Nelson (to head of Lake Winnipeg).....	400	Columbia (in Canada).....	459
Rupert.....	380	Kootenay (total).....	407
Red (to head of Lake Traverse).....	355	Kootenay (in Canada).....	276
George (to Hubbard Lake).....	345	Skeena.....	360
Moose (to head of Mattagami).....	340	Bulkley (to head of Maxam Creek).....	160
Abitibi.....	340	Stikine.....	335
Mattagami.....	275	Aleak.....	260
Missinabi.....	265	Nass.....	236
Hayes.....	300		
Winisk.....	295	Flowing into the Arctic Ocean	
Whale.....	270	Mackenzie (to head of Finlay).....	2,635
Harricanaw.....	250	Peace (to head of Finlay).....	1,195
Great Whale.....	230	Finlay.....	250
Leaf.....	165	Smoky.....	245
Flowing into the Pacific Ocean		Bulkley.....	185
Yukon (mouth to head of Nisutlin).....	1,979	Little Smoky.....	145
Columbia (total).....	1,150	Parsnip.....	765
Fraser.....	850	Athabaska.....	210
Thompson (to head of North Thomp- son).....	304	Pembina.....	755
North Thompson.....	210	Liard.....	350
South Thompson (to head of Shuswap).....	206	South Nahanni.....	295
Nechako.....	287	Petitot.....	260
Stuart (to head of Driftwood).....	258	Fort Nelson.....	530
Chilcootin.....	146	Hay.....	425
West Road (Blackwater).....	141	Peel (to head of Ogilvie).....	310
Yukon (Int. Boundary to head of Nisutlin).....	714	Arctic Red.....	258
Porcupine.....	590	Slave.....	200
Lewes.....	338	Twitya.....	605
Pelly.....	330	Back.....	525
Stewart.....	320	Coppermine.....	430
Macmillan.....	200	Anderson.....	275
White.....	185	Horton.....	

Ocean Areas and Seas.—A comprehensive description of the oceanic areas and seas of Canada would include sciences such as oceanography, marine biology and meteorology. However, the basic factor in any study of the oceanic-continental margin is the physical relief of the sea-floor and the scope of the information presented here is, therefore, restricted to this and a few salient features of the Atlantic, Arctic and sub-Arctic and Pacific marginal seas surrounding Canada. For further details, see Year Book 1947, pp. 3-12.

Atlantic.—Incursions of the sea in the Atlantic coast are formed in depressions between crests of the Appalachian Mountain system as it dips to the ocean. The submerged Continental Shelf, protruding seaward from the shore, effects the transition from continental to oceanic conditions. This Shelf is distinguished by great width and diversity of relief. From the coast of Nova Scotia its width varies from 60 to 100 miles, from Newfoundland 120 to 50 miles (at the entrance of Hudson Strait), and northward it merges with that of the Polar Sea. The outer edge of the Shelf, known as the Continental Shoulder, is of varying depths of from 100 to 200 fathoms before the Shelf suddenly gives way to the steep declivity leading to abysmal depths. The over-all gradient of the Atlantic Continental Shelf is slight but the whole area is studded with shoals, plateaux, banks, ridges and islands and the coasts of Nova Scotia and Newfoundland are rugged and fringed with islets and shoals. Off Nova Scotia the 40-fathom line lies at an average of 12 miles from