

Case study: Sparsely and densely populated areas in North America

North America has a low population density compared with most other parts of the world. The USA has an average of 33 persons per km², while Canada has only 3 per km². In both countries population is highly concentrated in some areas while large expanses of land elsewhere are very sparsely settled (Figure 4). Very few people live in the cold, dry and mountainous regions.

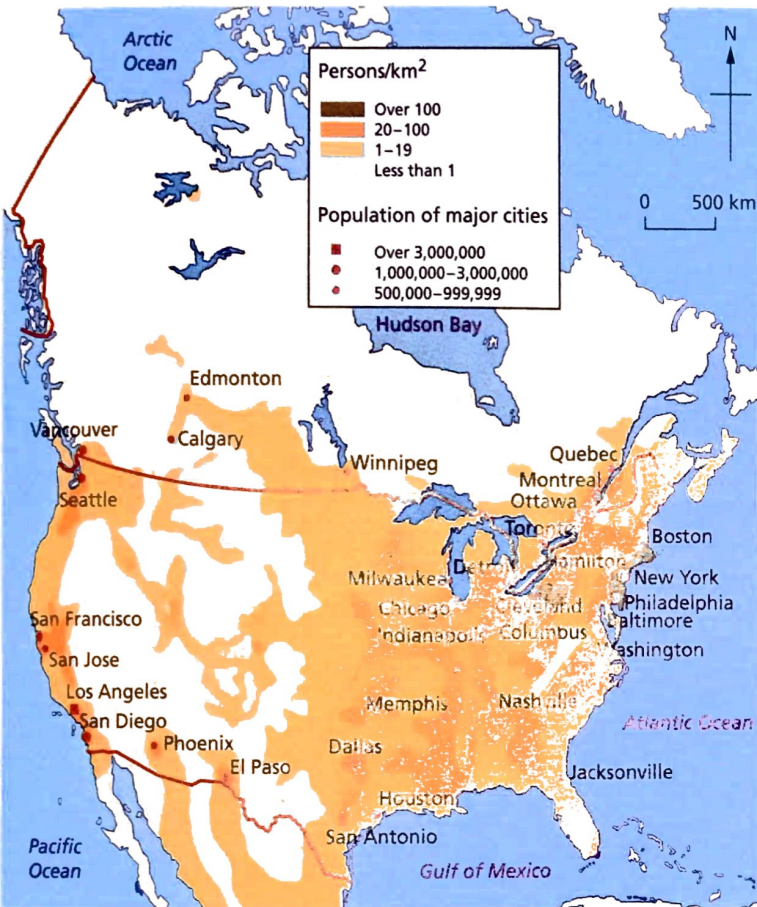


Figure 4 Population density of North America

The Canadian northlands: a sparsely populated region



Figure 5 A remote community in the Canadian northlands

The Canadian northlands comprise that part of Canada lying north of 55°N. Figure 4 shows that virtually the whole area has a population density of less than one person per km².

The influence of low temperature is very clear in the north and largely explains why 75 per cent of Canadians live within 160 km of the main border with the USA. Winters are cold with most of the region having a mean January temperature below -20°C. Summers are short, becoming increasingly shorter further north. The climate in much of the region is beyond the limits of agriculture, which is a key factor in explaining the very low rural population density.

Much of the northlands are affected by permafrost. Here the ground is permanently frozen to a depth of about 300 metres. In summer the top metre or so thaws out, resulting in a marshy, waterlogged landscape. Life is extremely difficult in the permafrost environment of the northlands and, apart from the Inuit and other native groups, the few people living there are mainly involved in the exploitation of raw materials and in maintaining defence installations, although the role of tourism is expanding.

The great distances separating the generally small communities in the northlands and the severe environmental conditions in this vast region have created substantial economic, engineering and maintenance difficulties for transportation development. Immense areas of the northlands are lacking in surface communications. Not one of the railway lines extending into the northlands crosses the Arctic Circle! The road system is also very sparse, the most important elements of which are the Alaska, Mackenzie and Dempster highways. The northern limit of the Mackenzie Highway is Yellowknife on the northern shore of the Great Slave Lake. The town, which has a population of over 19 000, was founded in 1935 after the discovery of rich deposits of gold. Yellowknife is the capital and largest settlement in the Northwest Territories.

The use of water transport is dictated by location and season, with many water transportation routes frozen over for much of the year. For many communities, air transport is the only link they have to the outside world.

Case study analysis

- 1 With the help of an atlas, draw a sketch map of the Canadian northlands. Show the main physical and human features of the region.
- 2 What is the average population density of this region?
- 3 Why is this the most sparsely populated region in North America?