Canada's ecological diversity

Canada's ecological diversity is as immense as the country itself. The snow-capped Rocky Mountains are met by the vast plains of the Prairies; dense forests in central Canada give way to the indented coast of the Atlantic. The climate can be very mild in one spot; in another, its harshness takes your breath away. Cities and small towns abound in the south; in the north the population is extremely scattered.

To make it easier to describe and study its surroundings, Environment Canada, the department responsible for implementing Canada's environment policy, has divided the land into 15 ecozones within which environmental characteristics are relatively uniform (see map). Ecozones are defined by physical geography, hydrography, soil, vegetation, fauna, flora, and to a certain degree, human activity. Except for Nova Scotia and Prince Edward Island, these ecozones scorn political borders; several provinces are part of four or five different zones. The largest (the Boreal Shield) is 10 times the size of the smallest (the Atlantic Maritime Ecozone). More than half of Canada's population lives in the second-smallest ecozone, the Mixed Wood Plains.

This publication will take a closer look at the various elements of the Canadian environment and the measures taken to preserve their integrity, both through legislation in Canada and through participation in international pacts for protection of the environment.

Canadian Environmental Protection Act

In 1988 Parliament passed the Canadian Environmental Protection Act, an umbrella act to protect Canadians from any form of pollution caused by toxic substances. This comprehensive act covers the entire life cycle of these substances, from preparation to elimination, going through manufacture, transport, distribution, use and storage. Over 30 000 chemicals are currently used in Canada. It is vital to determine which ones should be immediately evaluated as to their effects on the environment and health, in order that the necessary control measures can be taken. Industry is now responsible for providing information that the government needs for these evaluations.

Those who ignore the regulations run the risk of fines as high as a million dollars a day and five years in prison. The act also recognizes the principle of "polluter pays." The courts can order polluting companies to pay for cleaning up. Moreover, for the first time, company executives can be sued and convicted for infractions of the act committed by their company. The company can also be obliged to pay back any profit made from pollution.