

CANADA

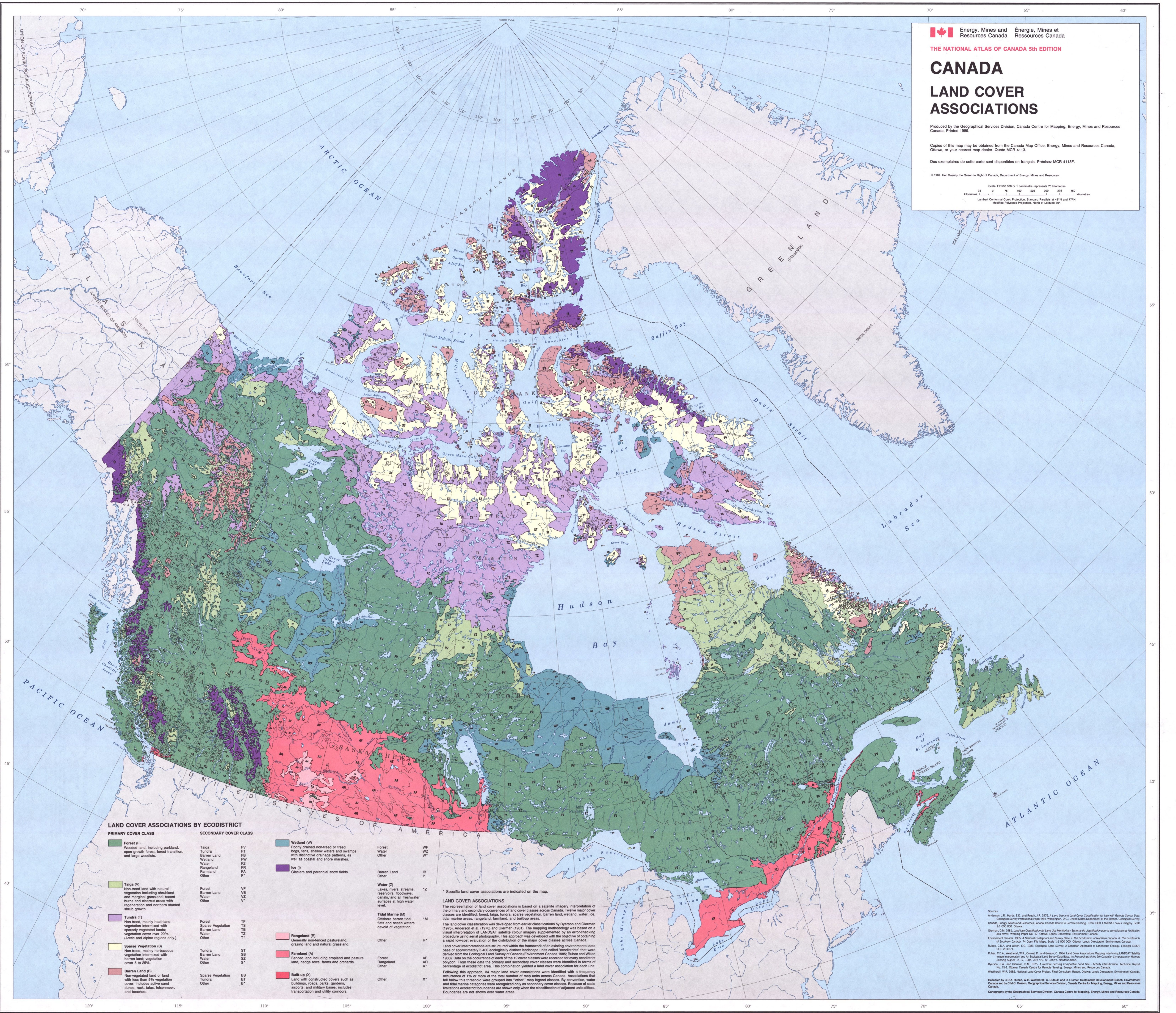
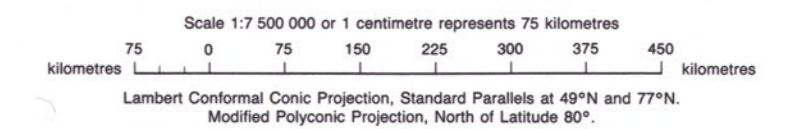
LAND COVER ASSOCIATIONS

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LAND COVER ASSOCIATIONS BY ECODISTRICT

PRIMARY COVER CLASS

- Forest (F)**
Wooded land, including parkland, open growth forest, forest transition, and large woodlots.
- Taiga (V)**
Non-treed land with natural vegetation including shrubland and marginal grassland, recent burns and cleared areas with regeneration and northern stunted shrub growth.
- Tundra (T)**
Non-treed, mainly heathland vegetation interspersed with sparsely vegetated tundra; vegetation cover over 20% (Arctic and alpine regions only).
- Sparse Vegetation (S)**
Non-treed, mainly herbaceous vegetation interspersed with barren land; vegetation cover 5 to 25%.
- Barren Land (B)**
Non-vegetated land or land with less than 5% vegetation cover; includes active sand dunes, rock, talus, tephra, and beaches.

SECONDARY COVER CLASS

- Taiga (V)**
Forest (F)
Barren Land
Water
Other
- Tundra (T)**
Forest (F)
Barren Land
Water
Other
- Sparse Vegetation (S)**
Tundra (T)
Barren Land
Water
Other
- Barren Land (B)**
Sparse Vegetation (S)
Tundra (T)
Water
Other

- Wetland (W)**
Poorly drained non-treed or treed bogs, fens, shallow wetlands and swamps with distinctive drainage patterns, as well as coastal and shore marshes.
- Ice (I)**
Glaciers and perennial snow fields.

- Water (Z)**
Lakes, rivers, streams, reservoirs, floodways, canals, and all freshwater surfaces at high water level.
- Tidal Marine (M)**
Offshore barren tidal flats and ocean waters devoid of vegetation.
- Other (R)**

- Rangeland (R)**
Generally non-fenced pastures, grazing land and natural grassland.
- Farmland (A)**
Fenced land including cropland and pasture land, hedge rows, farms and orchards.
- Built-up (X)**
Land with constructed covers such as buildings, roads, parks, gardens, airports, and military bases; includes transportation and utility corridors.

LAND COVER ASSOCIATIONS
The representation of land cover associations is based on a satellite imagery interpretation of the primary and secondary occurrences of land cover classes across Canada. Twelve major cover classes are identified: forest, taiga, tundra, sparse vegetation, barren land, wetland, ice, lake, tidal marine areas, rangeland, farmland, and built-up areas.
The land cover classification was developed from earlier classifications by Pyenson and Gierman (1975), Anderson et al. (1978) and Gierman (1981). The mapping methodology was based on a visual interpretation of LANDSAT satellite colour imagery supplemented by an error-checking procedure using aerial photography. This approach was developed with the objective of obtaining a rapid low-cost evaluation of the distribution of the major cover classes across Canada.
Land cover interpretations are structured within the framework of an existing environmental data base of approximately 5 400 ecologically distinct landscape units called 'ecodistricts' that were derived from the Ecological Land Survey of Canada (Environment Canada 1985; Rubec and Wilson 1983). Data on the occurrence of each of the 12 cover classes were recorded for every ecodistrict polygon. From these data the primary and secondary cover classes were identified in terms of percentage of ecodistrict area. This combination yielded a land cover association for each unit.
Following this approach, 34 major land cover associations were identified with a frequency occurrence of 1% or more of the total number of map units across Canada. Associations that fell below this threshold were grouped into 'other' map legend classes. By convention, water and tidal marine categories were recognized only as secondary cover classes. Because of scale limitations ecodistrict boundaries are shown only when the classification of adjacent units differs. Boundaries are not shown over water areas.

* Specific land cover associations are indicated on the map.

Sources:
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Research by C.D.A. Rubec, W.R. Weatherill, C. Ouse, and D. Ouse, Sustainable Development Branch, Environment Canada and by C.M. Ouse, Geographical Services Division, Canada Centre for Mapping, Energy, Mines and Resources Canada.
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