maple, oak, elm, beech and ash. Sugar-maple (*Acer saccharum*) and red oak (*Quercus borealis*) form isolated stands in this coastal region. Beech (*Fagus grandifolia*) is found only in the southwestern extremity of the peninsula. Dansereau (1944) believes that these coastal hardwood stands are remnants of a former more widespread deciduous forest of a post-glacial warm period. A discussion of this supposedly *xerothermic* period is given by Raup (1937) and Sears (1942). A distinct amelioration of climate (with subsequent deterioration) is generally accepted to have occurred in Greenland, Iceland and Scandinavia in post-Pleistocene times. The existence of such a warm post-glacial period in eastern North America is supported by the finding of pollen of the hemlock (*Tsuga canadensis*) at Matamek, on the north shore of the Gulf of St. Lawrence, several hundred miles from its present limits. The persistence in Newfoundland of such southern Coastal Plain species as curly-grass fern (*Schizaea pusilla*) and broom-crowberry (*Corema conradii*) also points to a relatively recent climate of more temperate nature, as has the discovery of logs buried in a bog at Blanc Sablon, southern Labrador, some miles from the present edge of the forest. In accordance with the present differences in climatic conditions between Western and Eastern Canada, however, Savile (1963) notes several factors in addition to low temperatures that evidently contribute to the inability of white spruce (*Picea glauca*) to spread into the barrens in the vicinity of Great Whale River, on the southeast coast of Hudson Bay.

Precipitation-Evaporation Ratio.—Another climatic factor of great importance in regions with comparatively little rainfall is the relationship between precipitation and evaporation, rather than precipitation alone. Under certain conditions, a few inches of rainfall may be sufficient for a plant to complete its life cycle. However, if high temperatures or high winds cause abnormally rapid evaporation from a plant (transpiration), it may wilt and die, particularly in the seedling stage.

In order to map climatic provinces that would correspond to observed biotic provinces, Thornthwaite correlated evaporation measurements made at twenty-one meteorological stations in the United States with the corresponding monthly precipitation and mean monthly temperature at the same stations. By so doing, he was able to devise a formula that allowed the computation of the P-E ratio (monthly precipitation divided by monthly evaporation), and hence, the P-E index (sum of the twelve P-E ratios). Plotting the indices on a map, and drawing isopleths, he divided North America into the humidity provinces Wet, Humid, Sub-humid, Semi-arid and Arid.

The Boreal Forest Floral Region falls into Thornthwaite's "taiga" Climatic Province, with some overlapping into the more northerly "tundra" Climatic Province, both provinces being characterized by the limiting factor of low temperatures, precipitation being usually adequate for plant growth. The Acadian Forest Floral Region falls within his Wet Microthermal Climatic Province, characterized by suitable temperatures and adequate precipitation at all seasons for plant growth. The Great Lakes–St. Lawrence Forest Floral Region falls within his Humid Microthermal Climatic Province with suitable temperatures although somewhat less (but adequate) precipitation. The Deciduous Forest Floral Region is included by Thornthwaite in the latter province but, botanically at least, gives strong indication of being a northern outlier of his warmer Humid Mesothermal Climatic Province. The northern (parklands) part of the Prairie Grasslands and Parklands Floral Region coincides in general with the Sub-humid Microthermal Climatic Province (temperatures suitable, precipitation usually adequate) while the southern part falls within his Semi-arid Microthermal Climatic Province (temperatures suitable but precipitation usually deficient and limiting plant growth). Large parts of the western floral regions fall within Thornthwaite's Wet (Coast Forest) and Humid (interior forests) Microthermal Climatic Provinces. The remarkable Dry Interior of British Columbia, a broad belt extending northward to Kamloops and beyond, is placed in his Sub-humid Microthermal Climatic Province but is undoubtedly a continuation northward of his Semi-arid Microthermal Climatic Province with deficient precipitation. Rainfall at Kamloops during the growing season is usually less than five inches. Sagebrush (*Artemisia tridentata*), antelope-brush (*Purshia tridentata*) and western yellow pine (*Pinus ponderosa*)