

to the movement of the earth and due to differences of temperatures over large areas, are the causes of what we may call the *cosmic* climates; and by local modifications of these conditions the *local* climates are produced.

It stands to reason that our means are too puny to attempt an influence on the causes of the cosmic climate, and even the local climate can be influenced only in a limited way; especially if a practical issue or considerable degree of difference is considered.

Even if we have found, as we have, that temperature and humidity conditions in a dense and extensive forest are different from those of an open field, it remains still an open question of how and how far the forest condition influences the open field conditions and vice versa; and how large the area affected or to be affected must be to produce an influence of practical value.

Influence of large forests

We know without measuring that by interposing the shade of a single tree between us and the sun we have influenced the temperature of the air; by building a house around us we influence our local climate. A small plantation on the open prairie breaks the velocity and modifies the temperature of the air on the leeward side, but on the windward side such an influence would not be noticed.

We realize that a forest cover may produce certain air conditions, but their communication to surrounding country would depend on its location with reference to the prevailing winds: the forest located on the leeside will therefore have different influences than on the windward on the neighboring field according to their location. The whole exchange and mutual modification of conditions, and whether the one or other condition will prevail in a practicably sensible degree will depend on the size or area of the same. Not only the size of the area under forest, but the character of the forest, its density, its soil cover, its composition, elevation and exposure, its age and height will determine the degree of its influence. We can, therefore, not readily generalize from place to place.

All we can safely claim is that the forest condition, due to its lower temperature and greater relative humidity, is favorable to precipitation as against the open field with its higher temperature and drier air, which furnish less favorable conditions for precipitation. Extensive forest areas are as a rule favored by large rainfall, but is an open question whether the forest is the cause or the result.

We must doubt, however, whether the small woodlot is a rainmaker.

B. E. Fernow.

Wind Screen to Cost 20 Millions

Our government, says Pearson's Weekly of London, has a scheme in hand to create a wind screen of trees along the top of the cliffs of the exposed western coast, at a cost of twenty millions. This screen will not only supply much wanted wood, but will prevent the salt Atlantic gales sweeping over and souring the land behind it, so freeing millions of acres of land for wheat and other cereal cultivation.

QUEBEC'S FORESTS.

Quebec province possesses 130 million acres of merchantable forests of which about 48,000,000 acres are included in the fire-protected territories of the St. Maurice, Ottawa River, Laurentian and Southern St. Lawrence Associations. Another fifteen million acres of Quebec's forests are privately owned, about nine million acres being in the seignories.