

rivers of the Dominion. Many thousands of dollars worth of crops and other property are destroyed by overflows and floods and many more by the droughts which one Province or another suffers yearly—all or nearly all of which would be avoided if the water supply of the country were properly regulated; and the conservation and management of the forest is the only agency available to this end.

The tempering effect of the forest on the farm need only be mentioned. By modifying the velocity and temperature of strong winds a great reduction is brought about in the protected fields. We plant wind-breaks about our orchards and out-buildings to secure shelter and thus temper the hot winds of summer and the cold blasts of winter. An extension of this system to the fields would greatly increase the yield in crops. The increased moisture which forest protection affords because of the decreased evaporative power of the winds, the velocity of which has been reduced by passing through forest, is very considerable. It is estimated that a foot in height of forest growth will protect one rod in distance, and a succession of tree plantations would very materially increase this protective power. The forest tempers the farm, too, by preventing deep freezing of the soil and shortening the cold of winter.

Whether or not the forest may increase the water fall over the adjacent area is still a question open to discussion, but no one doubts that by transpiration, the moisture near forests is greatly increased and vegetation thus beneficially affected. But even if no increase is admitted in the rainfall because of forest influences the availability of whatever does fall is greatly increased by a forest growth properly located. In forests the water percolates through the soil most thoroughly and the snow fall is caught by them and melted so gradually as to be subject to little waste. Larger amounts of water are, therefore, held by the forest soil and sink deeper into it than into that of the open fields. The sun and wind, the great moisture-dissipating agents, not having full play in the forest, the conservation of moisture is much easier than elsewhere. The water supply available in the soil is thus increased 50% scientists tell us. Increased percolation and decreased evaporation afford large quantities of moisture to feed the springs and sub-soil waters and these are finally made available to the growing crops in times of extreme drought.

The forest as well as watering, tempering and protecting the farm supplies it with much useful and valuable material. Those who have to purchase coal at big prices know how it eats into the year's revenues. Once established the wood-lot properly handled will reproduce itself and supply in reasonable proportions not only the fuel but much of the timber and lumber