

Reclothing the Prairies With Trees

By Archibald Mitchell, Western Representative of the Canadian Forestry Association.

Would the Prairie ever naturally become covered with trees? Yes, without any doubt; and there is abundance of evidence to show that the process is going on before our very eyes.

When white men first came to the western plains, practically the whole of Western and Southern Manitoba was open prairie and so was Southeast Saskatchewan. There are still plenty of people living who will tell you that west of Brandon, forty years ago, except for the river bottoms and the coulees there were no trees on the Prairie. Now you have to come clear west to Pilot Butte ten miles east of Regina, a distance of some two hundred miles, before you are out of the bluffy country.

This summer we met Mr. H. J. Moberley, the well-known old Hudson Bay pioneer, who told us that sixty years ago you had only to go a few miles south of Edmonton and Fort-a-la-Corne before you struck the open Prairie. Now you go south nearly 170 miles before you see the last of the native bush. Twenty years ago, the first bushes as you drove north from Calgary, were met between Carstairs and Didsbury. Now you find them twenty miles further south.

Indeed, in all the country mentioned, you have only to look at the trees to see how very modern most of the bush is. Tree sizes run from about twenty to forty years old and the smaller stuff, the brush, from that down.

Timber Spreading South.

All along the northern fringe of the Prairie there has been a notable spread southward of the native bush in the last twelve or thirteen years, a spread in some cases of close to 100 miles. Not that this country has become totally covered with bush for it has not, but the native trees are now found on very many of the farms as far south as the line indicated.

This summer the Tree Planting Car of the Canadian Forestry Association passed over hundreds of miles where, at the side of the track as well as out in the fields, we saw many thousands of little patches as well as individual trees of native aspen poplar where twelve or thirteen years ago, to our own personal knowledge, there was not a bush to be seen.

Without any doubt, the Prairie is gradually being overtaken by the forest, and that too, in spite of a series of some of the driest years ever experienced in the west.



A Naseby, Saskatchewan, farmer who planted a shelter belt and now reaps his profits in a flourishing vegetable garden.

The "Why" of Bare Prairies.

Why is it? What has taken place so markedly in these recent years that could have any bearing on the matter? A more generous supply of rain has always been given as the reason for the North and East being tree covered and the South and West, bare, but in the last few years the whole country has been drier than ever before. The only real difference has been in the presence of the people living on the Prairie, and that is where we find the answer to the question. After they came, the fires were promptly put down and any little tree or patch of trees that showed any indication of rearing its head above the grass, was allowed to do so, and did not get burned off as had always happened before. Fire is the "Why" of the Prairie and there is little reason to doubt that practically its whole expanse might have been entirely covered with trees long ago but for the fires that were started by lightning and the Indians, and allowed to run unchecked except from natural causes before the coming of the white man.

The spread of the forest Prairie-wards is a slow, a very slow, process that depends on a rather rare triple combination of circumstances. The forest is north and east of the Prairie and as the prevailing winds are west and south west, and, as the spread of the trees depends on seed in the first place, it will readily be seen at the time the poplar seed (for it is practically all Aspen Poplar) is ready to blow, there must be a change of the wind right round from its prevailing direction, and it must blow practically the opposite way at the exact time the seed is ripe.

Add to this the fact that poplar seed loses its vitality very quickly after it is shed unless it soon reaches moist soil, and that the normal condition of the surface of the Prairie ground is dry, and it will be seen that a very unusual triple combination of circumstances must be set up before trees can spread on to the Prairie. The prevailing winds must switch practically right round at the exact time the seed is blowing, and there must be a period of rain either just before or after, for the soil to be in the right condition for germination to take place. A very unusual combination of happenings, but which does develop sometimes, and so we have the forest rapidly, as natural processes go, overtaking the prairie.

A very small proportion of the seed ever gives rise to seedlings and the little forest advance post rarely consists of more than a single tree at first. But the roots soon spread and send up suckers and before many years there is a dense mass of young trees which may in time become the nucleus of further seed spread.

The borders of sloughs are favorite starting places, but you never see the suckers spread towards the water. They are always away from it and towards the dry land. And it must not be understood that slough borders are the only starting places for they are often out on the dry land with not a slough for miles.

At the extreme west of the Prairie, close to the mountains, tree-spread has been much slower than anywhere else, and the cause is not far to seek. There is plenty of poplar in the foot hills to produce the seed and there is usually plenty of wind to carry it and in the right direction too, but rain rarely comes from the