Growing a New Forest Family at St. Jovite

By A. C. Volkmar, Forester, The Riordon Pulp and Paper Co.

Over Three Million Little Trees Being Prepared for Reforestation in Canada's Newest Nursery.

The reforestation policy of The Riordon Pulp & Paper Co., Ltd., was first started in 1916, when an experiment was made with Norway spruce seed, in a small quantity. The results were encouraging, and in 1917, it was decided to develope a nursery with an annual production of 1,000,000 select three-year-old transplants of spruce and about 100,000 select three-year-old transplants of white and red pine.

With this object in view a farm near St. Jovite was purchased and the part best suited reserved as a nursery. The soil is light and sandy, with a clay subsoil, about three feet from the surface. The site is a slightly rolling area, with a western aspect. To insure proper drainage in spring, a system of blind drains, or trenches filled with stone covered with earth, has been installed, which successfully carries off the surplus water.

The seed beds have been arranged to allow for three sets with an annual production of about three million seedlings each year. In this manner one set will lie fallow each year, following the removal of two year seedlings to transplant beds. The fallow beds will be sown to cow peas and clover, same being plowed in, as fertilizer, in addition to such quantity of other fertilizer as proves necessary to main the soil in fertile condition. The beds have been arranged to run with the contours, and where erosion is likely to occur, beds have been elevated on the lower side, so that the path-ways will check the flow of surface water and allow it to seep in more gradually. In cases of heavy slopes, the lower sides of the beds have been re-inforced with boards.

Watering System.

As no natural water supply was at hand, a tap line 2,500 feet long was run down to the village main and the water brought to the nursery by gravity pressure. This pressure was not sufficient for spraying purposes, so an open cement tank 10x10x10 ft. was built and the pressure for spraying supplied by a gasoline engine and pump.

Shade Frames

The shade frames now in use are 12x4 ft. covered by a coarse mesh burlap, on a roller, so that the frame body ramains on bed all season and only the burlap is rolled up, or unrolled, as the occasion requires. The nursery is so located that no natural shade is at hand, and consequently the seedbeds are kept under this diffused light during sunny days, and as the soil is light, and the heat and light strong, two year old seedlings will be kept shaded during extremes of heat, at least. The life of the burlap is about 21/2 seasons, but when the saving in labour is considered, in covering and uncovering the beds, the expense is practically no more than with lath frames.

Winter Protection.

Winter protection demands considerable attention, and is very necessary, as proven by experiment. The ground usually freezes to a considerable depth before the snow comes, which results in "heaving" to a great extent in the spring. To obviate this, the beds are covered with