

APPENDIX No. 2

HOW TO PROPAGATE PINES AND OTHER EVERGREENS FROM THE SEED.

By Mr. Sinclair:

Q. Can you propagate pine from cones?

A. Yes. The method of propagating the pine from cones is somewhat as follows: It is really very simple, but the seed bed must be looked after pretty thoroughly or you will lose the little pines. The seeds ripen in the autumn and if you are not in a timber district you have to climb the trees to get the cones. If you are in a timber district where the trees are being cut down in the early winter you can go there and collect the cones. It takes about one bushel of cones to make a pound of seed.

By Mr. Caldwell:

Q. Are any efforts being made to gather the cones here?

A. Practically none, I understand.

Q. In my own locality some young men are making a business of gathering the cones and selling the seed to the United States. The other day when I was home they told me they had extracted some \$1,600 worth of pine seed, all of which was shipped to the United States. Americans are coming over here and making a regular business of buying our pine seed, seemingly for export and not for local use. Doubtless this is more a provincial matter than it is one affecting the Dominion, but it would seem that there is something wrong in not giving the matter attention ourselves. I am sure they have collected thousands of dollars worth each year in our district?

A. And not only that, but some European houses have sent agents over, or employed agents in this country to ship seeds to Europe, especially Germany. That country has had agents in British Columbia looking for seeds of the Douglas fir. I think, they have also got a certain amount of pine seed from Ontario.

By Mr. Sinclair:

Q. Has any attempt been made to cultivate the Douglas fir in Ontario?

A. Not on a large scale. Douglas fir is doing very well at the Central Experimental Farm here. We have trees there now that are nearly 30 feet in height.

To return to the question of pine seed. The seeds are gathered in the cones and taken to a dry warm room, and in a very short time, a few weeks, the cones will open and the seed then drops out. That is screened and then becomes available. The seed is kept dry during the winter and in the spring is sown broadcast on the surface of the soil in little beds that are made just as you would prepare a garden for putting in the small vegetable and flower seeds. Usually the beds are about the width of this table, about 4 feet wide, and 10 or 12 feet in length, and they are surrounded by boards about 6 or 8 inches high, so as to keep them under control. A little sand is sifted over the seeds which are lying on the surface of the soil, but there is practically no depth of soil put over them. After seeding, the soil is beaten down with the back of a spade, or other tool, and the bed covered with a lath frame or with boards so as to keep the bed dark until the seeds germinate, which will be in a comparatively short time. After they germinate they are covered with lath frames so as to make a half shade. The laths are the width of themselves apart on the frame and the frame is raised about a foot off the bed. The difficulty is that if you have not any shade these little pines will scald as soon as they come up in our climate. Some bore holes in the boards surrounding the bed for better circulation of air, as good circulation is important. In parts of Nova Scotia, New Brunswick and Prince Edward Island they come up readily and thrive well without protection. In our climate the air is so dry they scald off in the bright sunshine and we have to put those laths over them so as to give them a half shade and moist conditions. Then they germinate in a short time. For the first season and part of the second it is necessary to keep the laths on. On cloudy