

NOTE ON THE RAISING OF BIRCH FROM SEED IN THE NURSERY.

By P. FINNERTY

THE birch is the "dainty lady of the woods" to the landscape gardener and the parkland forester but is usually the weed of the woods to the forester engaged in the replanting of cut-away woodland areas. To the forester concerned with the afforestation of bare but fairly fertile areas birch makes no appeal, possibly because plants of this species are seldom available but more likely because he sees no future in birch as against the many other species at his disposal for his main crop or as nurse species. To the forester charged with the planting of exposed infertile areas, however, birch must be a welcome addition to the very limited number of species which he can use with any hope of success. And surely he can hope for success with birch, the species that survives in the subarctic.

Birch is a useful tree on bare and poor areas because once established it regenerates freely. Planted through conifers it should help to check the spread of insects and disease. It will be used then in shelter-belts and in strips and groups for breaking up blocks of pine and spruce.

From the economic viewpoint the uses of birch may be limited but their importance might become worthwhile if enough of the mature timber became available, for example for the manufacture of plywood. Birch makes an excellent fuel and all who experienced the rigours of the fuel shortage of 1947 would agree that the building up of a strategic reserve of good firewood would be a desirable step.

Perhaps the greatest reason why birch has not been more widely used is that it is, or perhaps has been, difficult to raise from seed in the nursery. I deliberately use the words "has been" because over the past three years at Monaghan nursery it has presented no more difficulty than any other broadleaved species. In fact it presented less difficulties because the seed was not attractive to rodents.

The time of collection, storage and treatment of seed, time and method of sowing and subsequent treatment of seedlings are as follows:—

The seed is collected during dry weather in September. It is stored in a dry place up to the first week of February, then it is mixed with fine moist sand and kept damp until about mid May. It is then sown broadcast in 4 ft. beds. The beds are prepared in the usual way, they are not brought to as fine a tilth as for sitka spruce and contorta pine. A liberal covering of seed is then laid on and is lightly rolled into the beds. No soil covering of any kind is used. Immediately the beds are rolled they are covered with branches (sitka spruce and douglas branches because they are available). The beds are then kept watered, the seed being kept continuously damp until germination takes place.

This is not such a hard task as it might seem as the branches shade the beds and protect the surface from drying winds. The branches also save the beds from "washing" during the application of the water. Watering goes on usually into the third week after sowing. It has never been abruptly discontinued but has been broken off during a spell of damp weather. The branches are retained after the first and second weeding, being removed and replaced as weeding progresses. They are removed during damp or cloudy weather when the seedlings are established and are replaced on the beds in November and retained until the seedlings are lifted for lining-out.

It has been observed that the best seedlings were obtained from the richest ground. Ground which gave an excellent crop of sitka and norway spruce seedlings did not seem to be too fertile or even fertile enough for birch.