

Root Pruning of Fruit Trees

Geo. W. Tebbs, Hespeler, Ont.

"IF the heart be right, then the resulting life will be pure and good," has been said often of men. It is also true in the tree. The real secret of fruitfulness lies at the root literally. Let the root be right, and there will be large fruit, beautiful to look upon, and an abundance of it.

Further, it does not always follow that if a man have a good head, his life will be productive of the most good to others. The tree may have ever so well shaped a head, but positive benefit does not necessarily follow unless it results in fruit bearing; and this comes from an abundance of fibrous rootlets.

INCREASE ROOT DEVELOPMENT

How often is root development grossly neglected? From the time the nursery stock is purchased, when only too often the tree is rammed into the ground in any old way, with its roots frequently doubled under it as though it is to develop into an acrobatic contortionist. Little care is taken of the roots, the chief source of the strength of the tree. I think sometimes that our "nurses" who dig the stock from the "nursery" forget the fact that a young tree does not have roots that run down like a carrot towards the Antipodes, but that for a distance of, say, three feet, from the stem there is a whole mat of fibrous roots.

In a hurried filling of orders these are occasionally torn away. At least, such has been my impression when I have examined them upon their arrival. It is well if there are such webs of roots around your young stock. They will be well nourished, being near the surface, and the full influence of the air will keep a constant supply of food ready. But how many trees that are inclined to be the reverse of this be made to form a mass of roots? How may the roots be kept near the surface? The lifting and replanting once or twice will accomplish this. This operation will break the stronger roots and exuberant leaf action is checked. Beyond paring the ends of all broken roots with a sharp knife nothing more need be done. The tree is simply taken out and put back. The moving from the parent nursery to the purchaser's orchard will effect this in the first instance, and only occasionally is a second removal necessary.

To create an abundance of surface roots some people go round the town buying up surplus paving stones from an overstocked indigent corporation, and build a pavement under the tree. This is absolutely unnecessary. Mulch well, pulverize well, and you will have a soil full of air and moisture. The roots will then multiply and will naturally remain where there are so many good things to be taken advantage of.

First of all then get the soil into good condition for holding moisture through long periods of drought, and let the roots get plenty of air. If the trees have to be lifted a second time, my experience has been that showery weather in the autumn, about the time the leaves are ripe, is the best time. Begin at least three feet from the tree, and spade towards it.



Results of Rootpruning

An unproductive Duchess Apple Tree in the Orchard of Mr. G. W. Tebbs, Hespeler rendered fruitful by means of rootpruning.

But what about trees that are too large to move? There are thousands of trees in this Province that are not satisfactory, and yet they are too good to be destroyed. In these cases I would advise root pruning. Make a trench round the tree about one half of the way, doing one half one year and one half the next, preferably during the "off" years of the tree or when fruit spurs are least in evidence. Root pruning is not done by a haphazard butchery of the roots with the edge of the spade. A knife or small pruning saw should be used. The growing roots are much softer, and consequently easier to cut than the branches. As far as possible make upward cuts, as it will direct the new fibres towards the surface.

Make an effort to get at the strong roots which run down into an unproductive subsoil; cut out some of them at least, as they only produce wood. The accompanying illustration shows a

"Duchess" apple on my place that was absolutely unproductive, but which grew wood by the yard each year. I tried root pruning, with the result the first year after, as seen by the blossom, and a good harvest was afterwards gathered.

Value of Bees in an Orchard

J. W. Clarke, Cainsville

From my experience as a fruit grower and beekeeper I place great value on bees as a reliable means of proper fertilization of the blossoms. Some seasons we have more or less damp, muggy weather with little breeze to carry pollen. In such seasons bees have their usefulness in fertilizing fruit blooms. The undeveloped, one-sided fruit we often see in such seasons is due to imperfect fertilization.

I believe that every one growing fruit should have at least one or more hives of bees, if for no other purpose than the proper pollination of the bloom. Each orchard should have a few hives in it, as in cold or windy weather the bees do not go far from home.

PROFITABLE INVESTMENT

Not only will the bees prove a paying investment in distributing the pollen, but with very little care will make honey enough for the family and some to sell. Swarming can be controlled by ventilation and modern methods of handling.

Trees Injured by Mice

Considerable damage has been done to fruit trees during the past winter by mice. If attended to at once the injury can be much lessened. Where the injury is slight or even if the outer bark is all eaten off, if there are strips of the inside bark still left, cover with grafting wax and bank up where possible with earth to keep the bark moist and to prevent drying. The hot sun will soon destroy the life of the under bark. Where these shreds of live bark are near together, this will be all that is necessary to be done.

TREATMENT OF GIRDLED TREES

Where the bark is entirely eaten off, girdling the tree, paint the wood thoroughly with a good lead and oil paint, and as soon as the sap begins to run, cut scions and carefully insert them in the live bark at top and bottom, waxing thoroughly and tying firmly. A scion should be put in about every two or three inches around the damaged part. In such cases it is wise to cut back the top severely, as the evaporation from the top will be greater than the capacity of the scions to carry the moisture from the earth. In this way valuable trees can be saved that otherwise would be a total loss.

Prune fruit trees regularly each year.