Planting Memorial Trees on Roadways

By Henry J. Moore, Forester, Ontario Dept. of Public Highways

Newly planted trees should be staked—to hold them in position so that their roots will not be disturbed and to protect them from injury during storms. Apart from this the stakes serve the purpose of holding the trees vertically in position thus favouring uniformity and a pleasing appearance in alignment. The staking should be performed as soon as the trees are planted.

Trees which remain unstaked are apt to be blown out of a vertical position and as they move or partly oscillate in every breeze, their roots only by the greatest difficulty are able to seize hold of the particles of soil. If fall planted they will blow out of the vertical and should the soil freeze hard they will remain at various angles and appear very unsightly until they are straightened up in spring.

Stakes of a minimum length of six feet and a maximum of seven feet will be satisfactory for staking trees in memorial avenues or in fact anywhere along roadways. Stakes 2" x 2", painted and pointed at one end, will be strong enough for the purpose in question. The heaviest grade of trees, say 10' to 12', will require the seven feet stakes and the 8' to 10' or smaller grade the 6' stakes. Such stakes will cost 12 cents to 18 cents each according to the number ordered. Stakes which will be equally as satisfactory though perhaps not of such pleasing appearance are white cedar ones of 2" diameter and of the fore-mentioned lengths. These may be obtained from any owner of a cedar swamp or grove at a cost of 5c. each in quantity.

When placing the stakes in position, drive them behind the trees and about three inches therefrom and to a depth of about two feet. Place a piece of rubber about two inches wide entirely around the trunk. Take a piece of wire, pass it around the rubber and stake and secure it so that neither tree nor stake can move separately;

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or one-half inch rubber hose may be used. Pass this half way around the trunk, interpose a piece of rubber between stake and trunk, pass the wire through the hose and secure the ends behind the stake. This will effect the same purpose. The trees will be secured and the rubber between tree and stake will prevent chafing. Such staking is permanent and will suffice for two years when the stake and rubber may be removed.

Spacing the Trees.

The proper spacing of trees in Memorial or other avenues is a consideration of the greatest importance. The spacing should be such as to allow of proper and unrestricted development of both crown and root. It should also be such that they will not unduly shade the road surfaces and cause moisture to stay thereon to their detriment, nor to cause snow to drift and pile thereon during the winter. It has been said that avenues wherein the trees are planted fifty feet apart are the most beautiful. ' They may be equally beautiful where the spacing is greater. Along the Provincial Highways of Ontario the spacing is seventy-five feet. As, how-ever, the planting of avenues along the latter is not in question, the writer must leave the spacing to those responsible for the planting. A spacing of fifty feet between trees is not too great a distance and should certainly be regarded as the minimum. Planted a less distance apart the trees cannot properly develop. They will soon begin to crowd each other, the sunshine and rains will not have full access to the branches nor will the air have a full and free circulation through them. Light, air and rain are the agencies which help the trees to grow and the latter is the agent which removes all deleterious matter from the breathing pores of the leaves and keeps the tree cleanly and as a result healthy. Give the trees a chance to live. Allow them to breathe the fresh air and to enjoy the cleansing and health-giving properties of light and rain. Only when such facilities are afforded will the avenues develop the majesty and the grandeur of which they are capable.

Maintaining the Trees.

During the first two years after transplanting, the trees must at the proper times be cultivated and watered. If such practices are not affected, a large number will die and the surviving ones will not grow satisfactorily. At least four times during the late spring, summer and fall months the area of the original hole around the trees should be cultivated. This to promote the aeration of the soil, to favour the formation of food, to remove weeds and last but not least to conserve the moisture in the soil. Just as vegetable and other crops respond to cultivation, so do the young trees.

During the periods of drought water must be afforded to newly planted trees. A thorough and adequate one must be given when necessary. Four or five times during the growing period will suffice even during the driest summer if the applications are judiciously timed. Water is life to a newly planted tree and neglect to apply it will have but one result. Trees suffer from drought most of all during August, although any of the summer months, May, June and July, may be so dry as to retard growth or to cause death.

The signs of excessive drought are a wilted condition of the leaves which is later followed by a premature yellowing of the same. This condition should not be allowed to pertain. The yellow leaves will quickly shrivel and the subject die.

A cultivated soil will more evenly absorb water than an uncultivated one. Cultivation should thus be effected before water is applied. If applied slowly, the water may be evenly distributed around the tree and all of it will soak in. As much as eight to ten gallons may be applied to each.