Don't Neglect Tree Maintenance

By C. F. Greeves-Carpenter

Photos courtesy The F. A. Bartlett Tree Expert Co.

TREES around the clubhouse give a certain air of charm and distinction which is both pleasing and restful. Trees are equally important at strategic points about the golf course and along the fairways for they create perspective, give definiteness to the length and breadth of the hole, and, in many instances, even determine the nature of the shot. It is, of course, true that they frequently may form an even greater hazard than the pit, trap or bunker.

The majority of golf courses have been carefully landscaped and it is by no mere accident that in many instances the clubhouses have been built near the shades of stately oaks, elms or other species of trees. Trees, though, should never be allowed to just grow, Topsy-like, to their heart's desire. Just like the Topsys in the world today they have to be trained when young, guarded, nurtured and safeguarded against accident and disease and the ravages of time.

Food is just as important to tree health as it is to our own health, and food which is lacking in the right ingredients will not sustain life. Tree food must be supplied the growing tree. This is not necessarily limited to the young tree but includes the mature specimen as well, for while there is life in a tree, no matter what its age, it continues to grow and to need nourishment. The greens are fertilized or, maybe, treated to change or modify the chemical reaction of the soil so that a better green will result. For much the same reason it is necessary to feed shade trees. Particularly is this true in areas where leaves are not allowed to collect, decompose and thus give back to the trees some of the vital elements they need in order to continue to thrive.

No Certain Feeding Time

Feeding may be done at any time of the year, except when the ground is frozen. If trees are fertilized in the late fall, the ingredients will hold over in the ground in readiness for the next spring, and their chemicals or nutrient salts will be released with the first thaws, when the ground is usually in too slushy a condition to apply fertilizer. A tree food should be used that has been carefully compounded by a reliable company, and it should be placed in

close proximity to the feeding rootlets. The roots will then penetrate more deeply into the soil, which will serve to anchor the tree more firmly in the ground and thus give a greater measure of protection in the event of severe storms. To broadcast fertilizer intended for trees on the top of the soil at any time of the year is apt to attract the feeding rootlets to the surface where changing bacterial and atmospheric conditions would be harmful. This method of feeding would result in a heavy loss due to leaching. Well-fed trees are better able to resist the attacks of cambium-boring insects, they will have better, richer foliage, and the wood will be less brittle.

Pruning Needs Skilled Workman

Pruning, like every other phase of tree maintenance work, should not be left to the butchering administrations of a handy man with saw and paint pot. One has to know what and where to cut and has to have a very definite reason for each so that the general symmetry of the tree will not be ruined. Heavy limbs must be properly roped and lowered so that grass areas or buildings are not damaged. Pruning wounds must be properly protected with specially prepared antiseptic tree wound paint, otherwise the wood will crack and the way will be open for the inroads of wood-destroying agents to form a cavity.

Very frequently one sees a lot of twig and branch growth which has died back,



Workmen are shown 'feeding' a tree by power drill method, correct procedure for fertilizing ornamental shade trees.

and this gives both the trees and the property a very unkempt appearance. The removal of such small growth is technically referred to as a manicure job. The cause of the dying back of this young growth should be investigated, as invariably it will be found to be due to the work of injurious insects or fungi, to an undernourished condition, gas poisoning, or to some form of root injury. Merely to remove the dead material obviously would not, in such instances, protect the tree from a further dying back.

Perhaps the more prevalent and spectacular result of the work of insects or leaf fungi shows in irregular brown patches of foliage, or in a complete or partial defoliation of the affected tree. Of course this form of injury can be obviated by a timely spraying of the trees. Nowadays, stress is being placed on preventive tree work. For instance, if the elm leaf beetle is very prevalent in the community, spraying should immediately be done to prevent the trees from being infected.

Cavities in trees are quite frequently due to the work of wood-destroying agents or to defective pruning technique, though they may equally as well be due to physical or mechanical injury which breaks through the outer bark and exposes the tender growing tissue, partially or completely disrupting the flow of the sap. It is only natural that the top of the tree on the affected side would die when the sap flow is entirely cut off. Prompt first aid attention by a skilled tree surgeon will frequently result in the tree healing over the wounded area without any extensive repair work being necessary. Neglect naturally gives time for the wood-destroying agents to widen the gap so that a large cavity is formed. When these larger cavities are noticed they should immediately receive scientific treatment before the tree becomes so weakened that it is no longer structurally sound. The customary procedure is to remove the diseased and dead tissue, shape the cavity edges so that an even healing over by the tree will quickly result, and to sterilize and fill the cavity with some suitable filling medium which will meet the rigid requirements of tree life.

Trees Are Lightning Hazard

Trees constitute a real hazard in that they are excellent conductors of lightning. Usually standing higher than the buildings they overshadow, and giving off columns of vapor during humid weather, they attract lightning, which unless it is safely guided to earth, may rend the tree asunder, or tear down the trunk a certain length and jump to adjacent buildings causing heavy damage. Such trees, as well as isolated specimen trees, should have flexible lightning protection equipment installed. This will run the entire length of the tree, extending from the topmost branches down to the base of the tree, and



This tall tree on club grounds has been equipped with lightning protection equipment.

then buried in a trench to a point beyond the lateral branch spread, where it will be clamped to a rod buried in the ground. In some instances, two or more main horizontal conductors will be installed with arteries extending along the main or more exposed limbs. Such equipment offers an easy pathway for the lightning to discharge harmlessly into the ground and gives a zone of protection to adjacent buildings and possibly to human life, though for obvious reasons this latter protection has never been proved.

Tree maintenance, intelligently mapped out and planned, need not be a costly item, but an allowance should be made in the yearly budget for this expenditure if the trees and the grounds are to be maintained in a manner befitting the club. Lightning protection should be given the more important trees immediately, and an inspection of all the trees on the property should be made by a qualified expert who will make recommendations in line with the needs of the trees, and these can receive attention in the order of their importance.