

A TREE PROGRAM EXPERIENCE

On my first visit to Westmoreland Country Club in the Spring of 1963, I was impressed by the beauty of the golf course and especially the aesthetics offered by the mature American Elms that enclosed each hole from tee to green. Mounted on a wall in the Board of Director's room in the club house was an elaborate map in full color showing the location of each of the 1,296 trees on the club property. The tree inventory listed 25 varieties of trees and a close look showed 84 percent of the trees to be in three varieties; 773 elm, 214 mulberry, and 96 cottonwood. Today our tree inventory lists 1,862 trees and 101 varieties. Our present list shows 65 elm, 140 mulberry and 47 cottonwood. In a twenty year period we have removed 831 trees and planted 1,397 new trees.

It was in the mid-fifties that the Dutch Elm Disease reached the Chicago area. Around this time Westmoreland Country Club recognized a potential tree problem and embarked on a tree program. The program consisted of an elaborate Dutch Elm Prevention Program and a tree planting program. The tree planting program was the purchase of 200 small trees which were lined out in a tree nursery for future transplanting onto the golf course. Of these 200 trees, 150 were of the Augustine Elm variety. At the time the Augustine Elm was said to be resistant to Dutch Elm Disease — today we have 14 Augustine Elms remaining. As for the Dutch Elm Prevention Program, it worked well until 1970 because we were able to hold our losses to under 5 percent per year. Then came the ban on DDT and in 1974 our loss was 132 trees or 40 percent of the existing trees in one year.

In 1968 a committee was formed to review our tree situation and a Tree Program was established. The Tree Program Committee sets guide lines for tree planting, reviews sources for obtaining trees and establishes methods of financing the tree purchases. The committee became a permanent branch of the Grounds and Greens Committee and still functions to this day.

The guide lines for tree planting outlined the types of trees to plant, location of trees and the procedures for planting. From the beginning we have attempted to plant as many tree varieties as are adapted to our area. Our tree groupings have been planned to contain two or more tree varieties in an attempt to avoid the loss of an entire tree planting as has happened with a disease such as Dutch Elm.

In addition tree selection has been based on soil condition. The soils at Westmoreland range from a very well drained sand to a high water table organic soil; we have selected tree varieties to tolerate the various soil conditions. Shade trees have been placed at a minimum of thirty foot spacings in order to continue the use of seven gang rough units, the only exceptions have been evergreen and ornamental tree plantings. For two years after transplanting soil bridges have been left around trees to aid in watering the new trees. Our well drained sandy soil requires more tree irrigation than other soil types. These newly planted trees contain a yellow band which indicates to the golfer that he is allowed a free lift for such conditions. Each August we evaluate our tree program and plan for the fall and winter plantings. The first priority is to replace the key trees lost during the year, from there we work on additional tree groupings. Several times over the years we have obtained the services of a Golf Course Architect to advise in selecting tree planting locations.

We have used just about every available source for obtaining trees. We maintain our own tree nursery in an out of play

area of the property and raise many of our own trees. The nursery area will hold 175 trees spaced on 10 foot centers. We line out 1 to 1-1/4 inch stock and transplant the trees onto the golf course when they are in the 2-1/2 to 4 inch range. We purchased a tree spade attachment for our loader tractor for the purpose of transplanting our own nursery stock. Another source of trees has been our local tree nurseries. Over the years we have purchased quantities of 2-1/2 to 4 inch trees and our grounds crew has transplanted them onto the golf course. A number of trees larger than 4 inches have also been purchased, but the planting of these trees have been contracted to local nurseries or landscape contractors. Club members and neighbors have also been a tree source. We have obtained a number of Colorado Blue Spruce, White Pine, and Austrian Pine in the 12 to 18 foot range from these donations. From one member alone we obtained 26 trees. The club has picked up the tab for the transplanting which we contract out and our grounds crew generally fill the hole and sod the area from which the tree came. From this tree source we have been able to establish some beautiful evergreen plantings with sizes of trees that would cost a fortune otherwise.

A major portion of our tree program has been financed through membership donations. In the beginning a gift tree program was established to allow a club member to donate a tree. These trees are mostly in the 6 to 12 inch range and have been a tremendous aid in replacing key Elms lost on the golf course. Each of these trees contain a bronze plaque with the tree variety and the inscription desired by the donor. Over the years there have been 194 trees donated from the gift tree program. The plaques are attached to the tree by a stainless steel lag screw. The lag screw must be backed off about twice yearly as the tree resumes normal growth; we actually had a willow tree swallow a plaque one year. Only in 1974, the year we lost 132 Elms, did the club have a tree assessment. Otherwise our Capital Tree Expense has been in the \$3,000 range yearly.

Our tree program has not been problem free and I would like to point out a few items, some of which we learned the hard way. One often has a tendency to over plant, particularly when a key tree is lost. We have had cases where four to five trees were planted to replace one; now we are transplanting some of those trees to other locations.

Beware of "tree deals," the cheapest route is not always the best way to go. We had such a problem in which a member heard of a party who would furnish and plant trees at less than half the cost we have been paying our local competent tree nurseries. In this case \$15,000 was spent for seventy-five, 5 to 9 inch trees. We lost 75 percent of the trees because they were not treated as live material. It also may be added that we never found the guys again, even to honor their guarantee.

Remember where one puts guide wires and removes them after a year. We lost two nice evergreens because guide wires were left on for over five years and caused the girdling of the trees.

Be sure everyone is aware of your proposed tree planting locations — it is much easier to move a stake than a tree. We have practiced staking tree locations in September or at least two months prior to planting so that criticism from golfers can be weighed. We have been persuaded to reconsider a location.

Know your soil conditions. A tree grown in a well-drained soil may die of wet feet if transplanted in a poorly drained location.

Investigate the causes of tree death. One should avoid transplanting another Sugar Maple in the same location where a Sugar Maple died because of Verticillium wilt.

When planting balled and burlapped trees, remember to cut the twine from around the trunk. If the twine is made of nylon it could in time girdle the tree.

When selecting plant material, take along a committee member. It will relieve you of possible criticism should the tree not meet the vision the donor had in mind.

Tree planting and maintenance is another of the many functions of our position as golf course superintendents. It has been rewarding to watch the trees develop that have been planted over the past 15 years. Where once beauty was found in the uniformity of mature trees, now there is a different beauty in the variety of color, flowering, shapes and sizes produced by the various varieties used in the new plantings. It is amazing the rate at which a tree can grow when given adequate care and fertility. One can find tree management equally as enjoyable as turf management.

Julius Albaugh, Westmoreland C.C.



President Pete Leuzinger accepting in behalf of Ray Gerber, Editor of the BULL SHEET the third place award for the best publication from Lorraine Abbott from the National Golf Foundation.



Bob Miller at the CDGA Seminar



MIDWEST BREEZES

Dr. Hank Wilkenson is selling a paperback book "Compedium of Turfgrass Diseases" which should be in every Superintendents reference library. It is very descriptive with many colored pictures and is highly recommended. To order it, send a check for \$15.00 made out to "TURF", N423 Turner Hall, University of Illinois, Urbana, IL 61821.

Remember to mark your calendar now for the Turfgrass Field Day at the University of Illinois on July 27th, 1983.

Warren Bidwell, Superintendent of Olympia Fields C.C. is retiring May 1, 1983. Warren has been a superintendent for 53 years. He is going to be a full time consultant to the seed firm Tee 2 Green. He has just purchased a 26' motor home and he is planning to drive across the country visiting courses and giving talks at various meetings. He will be back here in the Chicagoland area around July 4th. Then he is scheduled for a six week trip to South Africa. Warren visited that same area back in 1981. We all wish Warren and his wife the best in their new ventures. We will miss his valued opinions and expertise in the turfgrass field.

Bob Miller, an old time friend of many superintendents, was honored by a small group of friends at a dinner party at the Park Ridge C.C. on April 6th, 1983. Gordon & Madeline Bethards of DuPont were the hosts for this gathering. Bob Miller was retired from DuPont at the age of 65 and has been working for Lakeshore Equipment & Supply Company since leaving DuPont.

GAS IN WATER WELLS

Many water wells in the Chicago area give off a flammable gas such as methane gas and hydrogen sulfide gas. While hydrogen sulfide gas is readily detected by its rotten egg odor, methane gas is tasteless, odorless and colorless and where the concentration is high enough may accumulate and mix with air to form an explosion. The Bureau of Mines states that a mixture of about 10% methane in a gas-air mixture will support combustion.

Where a pump house containing a well has been closed all winter the superintendent is advised to thoroughly ventilate it before starting up any of the electrical machinery, otherwise an electrical spark might set off an explosion.

C.E. (Scotty) Stewart