MAGCS Directors Column

"Selling a Tree Program" by Sean M. Daley

Ridge Country Club was once heavily populated with American Elms. So as you can easily guess, during the 70's the club lost quite a bit of it's tree canopy. Some trees had been planted, but by and large there were a lot of holes that were pretty well decimated with the exception of some Cottonwoods (which are no bargain). It was decided at the committee level to approach the board with a long term tree purchase plan. On the surface no stumbling blocks were foreseen, as everyone on the committee just assumed that there would be unanimous agreement that this was needed. That was a real bad assumption. We were greatly surprised and taken aback to find out there were a lot of people that liked everything wide open. They were shooting better and better scores as more and more Elms died. Or at least that's what they said. As a result we were faced with selling a program we thought would sail through without a bit of resistance. The following are a few things we did, and a few things we should have done to get the ball rolling.

1. Initially do one area completely. The first year we received approval to purchase a number of trees, to see how it would go. We evenly spread these around the various holes where they would eventually do the most good. The golf course just absorbed these trees, and you could hardly tell we had done anything. The next year we filled in 3 holes almost to completion, and everyone could get a better idea of what the course would look like in the future.

2. Make a map. This was invaluable. We posted these in the locker room, and gave one to each of the board members. We did not put specific varieties or sizes, but just a general outline of what we are trying to accomplish. This helped get people excited. Almost every man on the board saw areas that we proposed to put trees, that he saw the need also.

3. Take pictures. More and more I'm finding the camera to be one of the best sales tools I have. We proposed this program to the board late in the fall when people aren't playing as much. When you try to describe things to people that aren't out there every day like you are, they aren't always able to visualize the bare areas as well as you are. It also would help to have pictures of mature trees. We planted some pretty small stuff, and convincing people that tree is going to be anymore than a broomstick someday takes some illustration.

4. Allow time. Finally, give them some time to chew this over. A program of this scope is an expensive commitment for a club. We went in expecting to get automatic approval, and found out the board needed some time to make their commitment as strong as the grounds committee was already committed. I really think the best time to approach your board is the middle of the summer. That way they can look over the information you have given them, then see for themselves when they are out playing. Hopefully, some of these ideas will help you if you are faced with getting a long term tree program approved. It is a big undertaking so it will take a lot of homework on your part.

Pythium and Sand Topdressing

by Clinton F. Hodges Dept. of Horticulture, Iowa State University

The presentation made by me at the 1981 M.G.C.S.A. annual conference implicated Pythium in a root dysfunction of creeping bentgrass grown on reconstructed high sand content greens. The disease in question killed grass very rapidly and in a manner typical of Pythium "Cottony Blight". Examination of diseased plants, however, failed to yield Pythium or any other pathogen from above-ground portions of the plant. Pythium was found throughout the root system of diseased plants. It is believed that when a green on an old golf course is renovated to sand, Pythium may infest the sand from the collar and apron soil of the old green. The sand probably offers little microbiological competition for the Pythium and increased levels of irrigation and fertilization of sand greens may further promote the Pythium. There is also some evidence that more root mechanical damage may occur in sand than in soil; this could contribute to Pythium infection. This problem has not been observed in the roots of plants grown in traditional soil mixes.

To date, we have isolated four species of Pythium from the roots of creeping bentgrass associated with rapid death of infected plants. We are currently in the process of identifying the isolates to the species level and testing them for pathogenecity. It has been possible to infect roots in greenhouse studies and in some cases reduce the rate of growth of infected plants. Our present observations suggest that the Pythiums in question may infect the roots and co-exist with the plants with minimal damage under mild growing conditions. It may necessitate some form of environmental or cultural stress before death occurs. There are two outstanding problems for the superintendent relative to this disease. These are diagnosis and control. The rapid death of infected plants appears to be due to a foliar pathogen. However, examination of dying leaves usually fails to yield any pathogens and often times even saprophytic organisms are not present. When the root systems are examined they usually appear normal in size and color. Because of this it is assumed that root pathogens are not present. These normal appearing roots can, however, be severely infected by Pythium. The Pythiums associated with this problem do not cause a rot and the degree of discoloration may not be detectable with the naked eye. We have found that when we properly incubate what appears to be a healthy root from these diseased plants, Pythium will grow from the root within six hours. We are suspicious that these Pythiums damage plants by interfering with water relations, not by rotting.

Control of this problem in the field remains elusive. Intense aerification followed by application of Pythium specified fungicides into the aerifier holes may slow the disease. There is some indication that wetting agents used in conjunction with the fungicides may be beneficial. It also appears that following renovation of a green the first time the disease strikes it most severely; each subsequent year it becomes less severe.

Our primary research objectives for the next 2-3 years will be as follows: 1) Continue to collect and identify Pythium species associated with roots. 2) Determine pathogenecity of Pythium species and the conditions necessary for injury or death to occur. 3) Determine the nature of the pathogenecity; i.e. in that the roots are not rotted, how are the plants ultimately killed. 4) Examine approaches to control.