"Before we had Banol, we used to spray constantly during a heavy pressure year. We'd spray every week and sometimes every three days during intense pressure periods," recalls Barron.

"Now Pythium blight is definitely not the most important disease facing us because of products such as Banol and Subdue. With these two products, I don't worry about Pythium blight anymore."

For maximum Pythium blight control, Bowers suggests following a preventative fungicide application program. "Based upon weather conditions and disease pressure, applications should be made at 7- to 21-day intervals. Generally, three applications of a systemic fungicide, such as Banol, will suffice," notes Bowers, "since research shows that Banol's residual activity provides control up to 21-28 days. Pay particular attention to greens and fairways that have had past Pythium blight infections because living and dead grass plants, thatch and soil previously infected harbors mycelium and thick-walled resting spores (oospores). Under favorable conditions these spores can germinate within three hours and rapidly infect healthy tissue." But also beware of spread to new areas because, as Barron notes, "equipment and golfers' shoes can easily spread the disease to other areas, especially if you have excessive rain."

In addition to timely fungicide applications, follow good management practices. To discourage fungal activity, Bowers recommends that courses be adequately drained, clippings removed promptly, thatch maintained at less than one-half inch and proper fertility programs followed. Adequately drained and properly fertilized turf is healthier and more disease resistant.

"If you have poor drainage, Pythium blight often shows up in these spots," says Barron. "This is especially true," echoes Bowers, "in low-lying areas where drainage and air movement are restricted."

High levels of calcium and potassium also tend to reduce the susceptibility of turfgrasses to Pythium blight. In addition to Barron's regular fertilization program which consists of 5 pounds of nitrogen and 3 1/2 pounds potassium per 1,000 square feet per year, he applies an extra 1/2 pound of potassium per 1,000 square feet in late May or early June. "This extra potassium helps ensure that my turf is as healthy as possible going into the stress months of summer", explains Barron, who maintains pH levels of 6.4-6.8 on older greens and 7.0 on newer greens. "I may apply extra calcium if soil tests indicate it is needed."

Irrigation is performed on an "as needed" basis. "Our watering program is designed to keep grass from being stressed, yet we do not overwater because that provides ideal conditions for development of Pythium blight," explains Barron.

If a Pythium blight infection has already started, Bowers suggests using a curative program. "By applying higher rates of Banol, the infection can be stopped and further spread prevented. In addition, if conditions favor Pythium blight development, Banol's one-day 'kick-back' activity may prevent disease symptoms from developing."

A total disease prevention program that includes regular fungicide applications and proper management practices can eliminate superintendents' worries while providing quality turf for golf enthusiasts.

EDITOR'S CORNER

July is always an exciting month. It brings about so much that we superintendents must relate to. Challenges are always just an hour or so away with the weather conditions. Heat and humidity bring stress to our "little grass plants". We all must adjust to it continued on Page 7
accordingly. July brings to us in Mankato our annual Loren Krugel Golf Invitational Tournament. Mankato really hummed on the weekend of July 8-9-10. Mankato has its annual "Bend of the River" celebration, complete with dancing, parade, picnics and all around general party feeling. North Mankato has its "Fun Days" with a midway and all its frolics. And the Mankato Golf Club hosts the tournament. Needless, to say, hotels and motels were full and lots of people were on hand. The weather was perfect - mid to upper 90's - fairly low humidity - what more could one ask for?

Our course was in perhaps its best condition ever. Many of our newly planted trees from the past few years are starting to fill that void left by the loss of several hundred elms. The recently decorated clubhouse lawn area is starting to draw favorable comments. Our greens were smooth and fast, the rough was challenging, and tees and fairways looked great. All in all, a super weekend.

July also brings us the annual picnic, hosted this year by the illustrious and enterprising Steven Young and the Baker Park Golf and Park facility. Once again, a beautiful day with lots of sunshine. This outing has really grown in popularity over the years. For many years, Milt and John Wiley and their charming wives hosted this picnic. We have all really appreciated their efforts and time. But when they started this, there were only a few people there. This thing has grown from a dozen or two people to well over a hundred. I'm sure that Milt and John would like to be reminded of their efforts. Thank them if you see them. Largely through their efforts has this picnic become the super event that it is.

July also brought the U.S.G.A. Senior Open at Hazeltine. I was up there with virtually my entire crew and I know many of you were there. Chris Hague did a super job in his short tenure at Hazeltine and the golf course was in really super condition.

July also brought a note of dismay for many of us. Having learned that Leif Erickson of Austin will be moving to Montana means not only a loss of a really professionally minded superintendent but it also means a loss to our Board of Directors. Leif was just elected at our last annual meeting. His input into the meetings has been most helpful. He and Jim Wodash have been working hard on the upcoming annual conference. Leif will be missed. Our loss is Billings' gain. Much good fortune and success to a super guy.

So you see, July is quite a month. What happened in your part of the state? We have some good articles coming up. The cooperation in the past has been excellent. Many thanks to all the contributors...both past and upcoming. Have a good summer. Hope to see many of you at North Oaks on the 15th.

M.G.C.S.A. RESEARCH UPDATE
WHAT'S GOING ON?

by DON LINDBLAD & MARK SMITH
CO-CHAIRMEN
M.G.C.S.A. RESEARCH COMMITTEE

Just because you have not heard much about the M.G.C.S.A. Research Committee does not mean they have been inactive. The larger Research Steering Committee composed of Garold Murphy, Russ Adams, Roger Kisch, Larry Mueller, Keith Scott, John Nylund, Don Lindblad and Mark Smith has held periodic meetings in order to best allocate monies donated by your golf courses into productive turfgrass research programs.

That may sound great, but what have they actually done? Well, in May we allocated $3,000.00 to Penn State University to help fund Dr. Duich's project, "Effect of Management Factors on Putting Green Speed". A letter of appreciation from James L. Starling, Head of the Department of Agronomy, reads as follows: "On behalf of the Department of Agronomy and Joe Duich, I want to express our appreciation to the Minnesota Golf Course Superintendents Association for the $3,000.00 contributed in support of our research on putting green speed. Your interest in and support of our program is greatly appreciated. We are very proud of our research here at Penn State on turfgrass and you can feel confident that your funds will go for a good cause."