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ABOUT THE COVER

The Christmas season is one especially enjoyed by Wisconsin golf course superintendents. The fact that we work so many other holidays adds to the pleasure of one we do not. Winter weeks are slower than those of spring, summer and fall, allowing us time to soak in both the somber side of Christmas and the fun aspects it offers.

To celebrate the season, artist Jen Samerdyke has created a cover that bridges the Wisconsin golf courses and the new winter season.

A Christmas Prayer

Loving Father, help us remember the birth of Jesus, that we may share in the song of the angels, the gladness of the shepherds, and the worship of the wise men.

Close the door of hate and open the door of love all over the world.

Let kindness come with every gift and good desires with every greeting.

Deliver us from evil by the blessing which Christ brings, and teach us to be merry with clear hearts.

May the Christmas morning make us happy to be Thy children, and the Christmas evening bring us to our beds with grateful thoughts, forgiving and forgiven, for Jesus' sake. Amen!

– Robert Louis Stevenson

THE GRASS ROOTS

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Reflections

By Kris Pinkerton, *Golf Course Superintendent, Oshkosh Country Club*

As the 2000 golf season draws near to a close, I would guess that most superintendents, as well as myself, take time to reflect on the past growing season. How were course conditions this past year? How did Mother Nature influence our game plan? Could the greens have been a little faster or perhaps a bit smoother? What about the fairways - maybe greener, less dollar spot or even more upright turf? Did we retain enough staff members this past summer? Did we utilize our operating budgets to their greatest potential? Under budget? The list goes on!

Without question, golf remains a great game, whether we enjoy playing the game or enjoy the challenge of working with Mother Nature to condition our courses. However, when we collectively gather our thoughts, evaluate them and then look at the big picture, will our members and guests remember the course's condition three years from now? How about in three weeks?

In reality, most superintendents are evaluated each day regarding current course conditions. Yesterday is gone, and it means very little in our turfgrass profession. Now, don't get me wrong. We should all take a great deal of pride in our jobs and what we accomplish day in and day out. However, there are those few select golfers who can become obsessed or even confrontational about course conditions. It is often a corner that most of us do not like to get backed into. It may also lead us to question our original motives! "Should the greens have been a little quicker or perhaps a bit smoother? Will everyone be pleased now?" Probably not! There will always be something more or something else that someone will want.

A retired superintendent friend once shared a small tidbit of information with me. He said, "Do your best and go home." It's more often the relationships with family and friends that will endure and make a long lasting difference in life, not the day to day golf course conditions we produce. So go home this off season and rekindle those relationships with family and friends.

Remember, life is not about the game of golf or course conditioning.

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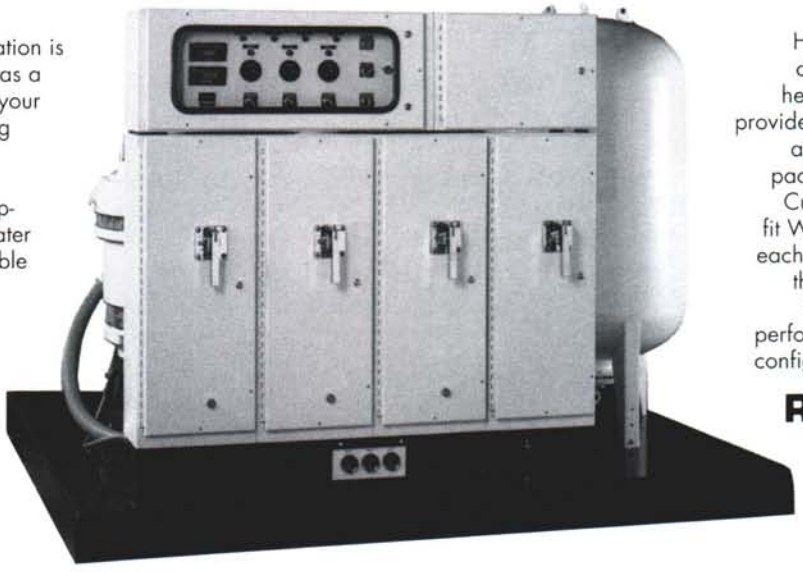

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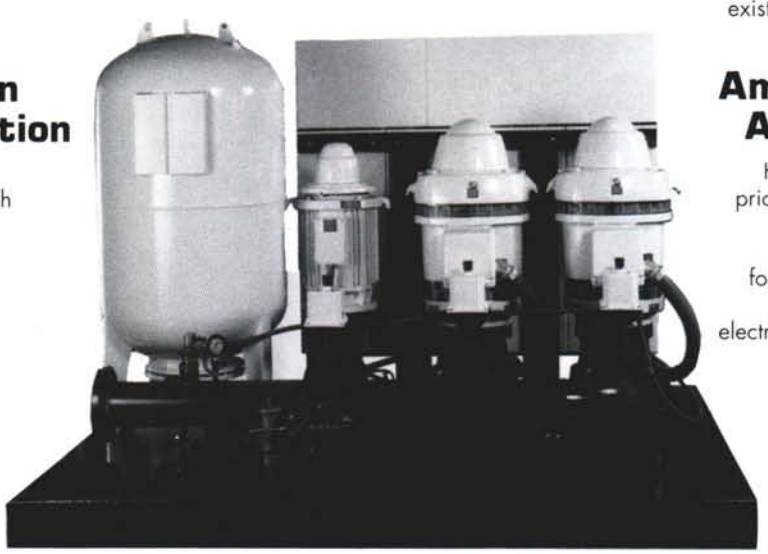

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Turfgrass Education at UW-Madison

By Dr. John C. Stier, *Dept. of Horticulture, UW-Madison/UW-Extension*

The last several years have been an exciting time for the turf program at UW-Madison because vacant positions have been filled and a greater level of commitment made by the College of Agriculture and Life Sciences. Since 1997 three faculty/staff positions have been added, and a fourth professor has begun collaborations with the group. The number of graduate students has risen from an average of one to a current total of eight. This type of commitment is necessary to position UW-Madison as a nationally recognized turf program. As important as the research and extension efforts are, we would not be here if not for the students. The entire turf team has worked hard to continue and to expand the turf course offerings at the university to give our students the best education possible.

History of the Program

Traditionally UW-Madison has offered two turf courses: Turf Management and Nutrient Management:Turfgrass. The Turf Management course is similar in scope and focus to many across the country. Course objectives include turfgrass identification and use, establishment, and the basics of the primary (mowing, fertility, irrigation) and secondary cultural practices (cultivation, topdressing, and pest management). Students achieve these objectives through a combination of formal classroom instruction and weekly laboratory sessions. The labs provide an important part of the students' education because education is combined with training. Examples of lab topics include sprayer and spreader calibration, establishment, cultivation, and mowers. Field trips are included to enhance students' exposure to different perspectives and types of turf management (e.g., golf and

sports turf). This is necessary because less than half of the typical 25 students plan on being golf course superintendents. The rest are general horticulture majors with a smattering from other disciplines such as landscape architecture or civil engineering. Many of these students end up having responsibilities in turf management as part of their job following graduation.

The Soil Science department is the home base for the turf program. Most of the undergraduates in the turf program are soil science majors advised by Dr. Wayne Kussow. As part of their curriculum, turf students complete the nutrient management:turfgrass course. Students learn in-depth the nutrient requirements of turfgrasses, turfgrass response to fertilizer types and timing of application, types of fertilizers and their use in an environmentally sound manner.

Both of these courses are taught each autumn. In order to compete on a national scale, though, turf students deserve access to more turf classes. The turf group has developed two additional courses in the past two years in order to help meet this need.

An Advanced Turf Course

Formally approved in spring 2000, the Advanced Turf Management and Physiology course was first taught as an experimental offering during autumn 1998 in accordance with UW guidelines. Eighteen students signed up, a good number for a new course! The course received overwhelmingly positive feedback and support from the students. The course meets three times weekly for 50 minutes. All of the students plan on making their career in the turf industry. Many have multiple years of turf experience which makes for good question and discussion, something which is sadly lacking in many undergraduate courses. The course focuses on how turf physiology and growth is influenced by management practices and by the environment. Discussion includes how management practices can be tweaked or changed to get the most desirable response out of a turf. Lectures begin with a recap of photosynthesis, respiration, and carbohydrate production and use. This is followed by lectures on environmental stresses: shade, drought, heat, and cold. Other sessions focus on new and unique aspects of turf management, ranging from how biotechnology will affect superintendents of the future to dealing with environmental issues. Students learn to use

the TurfGrass Information File (TGIF), an on-line database of turf information accessible through the internet.

Perhaps the most singularly useful aspect of the course for students is the special project. Based on a format perfected at Ohio State University by Dr. Karl Danneberger (1), students must develop a management plan and an itemized budget for a golf course situation. Working in groups of two to three, students are given a golf course description on paper (9 or 18 hole, public or private, bentgrass or Kentucky bluegrass fairways, disease problems, etc.). They are given a budget which they cannot exceed. Students develop management plans for their golf course including mowing and topdressing schedules, pesticide applications, bunker renovations, etc. An itemized budget is developed for all possible items including topdressing, fertilizer, pesticides, equipment, gas/oil, insurance, and labor. Students submit both a written plan/budget and deliver an oral presentation to the class to justify their management systems and their budgets. Student evaluations are included in the grading process. This is intended to enhance the students' oral communication skills.

How About Turf Pest Management?

In the autumn of 1999 Dr. Chris Williamson and I developed and taught another experimental course entitled "Holistic Turf Pest Management", primarily weeds and insects (we did not have a turfgrass pathologist at this time). This course also met three times weekly for 50 minutes. For five weeks we covered weed biology, cultural, and chemical controls. Insect biology and management were covered the second 5-week period. Now that Dr. Geunhwa Jung is on board as the turf pathologist, we have discussed offering the class again and including a section on turf disease identification, epidemiology, and management. While student evaluations were excellent for the first time the class was taught, we now would like to offer it at a time and in a manner which would allow superintendents a chance to take the course. The way we plan to accomplish this is through distance education.

Getting YOU Involved!

Using compressed video technology, we would beam the course as live presentations to areas outside of Madison, e.g., UW-River Falls, UW-Stevens Point, and Milwaukee Area Technical College. Plans are to offer the course during the autumn, probably one night each week, for a 3-hour period (e.g., 4-7 pm). Superintendents could enroll in the course without enrolling as a college student, because this course would be taught through both UW-Extension and UW-Madison. This would still allow traditional college students access to the course. The transmission and technology costs would be covered through fees paid by the students. We are now in the planning stages, with a course offering possible as early as autumn 2001. As always, we are seeking input and would appreciate hearing any suggestions you have for course topics and direction (e.g., should more time be spent on chemical versus non-chemical pest management, etc.). If PDI does come to pass, maybe we could get this course to count for credit.

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Budgeting for Insect Control in 2001

By Dr. R. Chris Williamson, *Department of Entomology, University of Wisconsin-Madison*

While many of you may be thinking about winding down and reflecting on this year's growing season, it is that time of year again, time to start planning for next year. Many of you must begin preparing your 2001 budgets.

This process can often be a very difficult task; much of your budgeting items and/or categories are derived from previous year(s) as well as predicted or anticipated expenditures. However, as you well know, no two years are alike. And to complicate the budgeting process even more, the increased range of expansion, infestation, and subsequent damage of Japanese beetles in Wisconsin brings yet another budgeting consideration into the equation.

The average cost of preventative white grub (i.e., Japanese beetle grubs) control is $100 per acre. Should you decide to treat tees, tee banks, green banks, fairways and roughs, you could be looking at an estimated budgeting cost of between $8000-$15000, depending on the size of your golf course. You do, however, have a viable option of not treating grubs preventatively; you can opt to treat grubs curatively with products such as Dylox or Sevin. Each of these products cost approximately $96 and $56 per acre, Dylox and Sevin, respectively.

At first glance it may appear that treating curatively is the most economical approach! Don't be fooled; preventative products that are commercially available frequently have considerably better efficacy or control (> 90%) compared to curative products (45-90%). Thus it may be wiser to budget for preventative control products such as Mach 2, Meridian, or Merit.

Another aspect of Japanese beetles that should be considered when budgeting is control of adults. Japanese beetle adults can cause extensive aesthetic damage to numerous trees and shrubs. Thus, allocating budget dollars for adult control should also be considered. Similarly to grub control, adults can also be controlled either preventatively or curatively. However, curative adult control products work equally as well as preventative products, and they often cost less.

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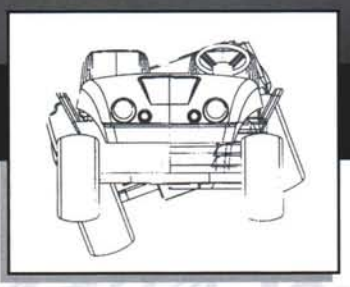

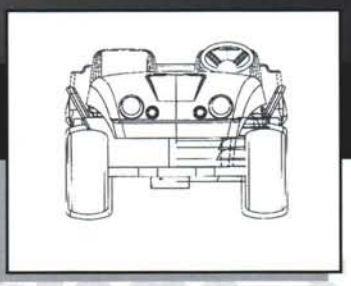

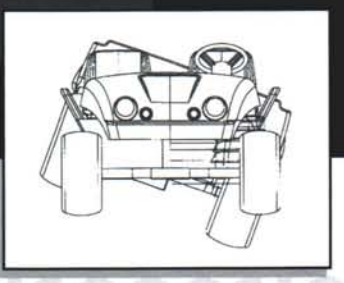

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