

Golf Courses have smallest effect on Great Lakes

Golf courses in the Great Lakes region of the nation contribute by far the least amount of pesticide residues found in the Great Lakes watershed, according to a report issued by the U.S. General Accounting Office.

The report, conducted at the request of U.S. Senator Carl Levin of Michigan, found that of the 56 million pounds of pesticides used annually in the United States and Canada in the Great Lakes watershed, only two million pounds were used on golf courses. The report found that 46 million pounds were used on agricultural crops, and eight million pounds were used on lawns.

As expected, herbicides made up nearly 75 percent of the pesticides used for agricultural purposes.

Levin, chairman of the Subcommittee on Oversight of Government Management, ordered the study because the Great lakes contain about 95 percent of the nation's fresh water and provide three billion gallons daily for domestic use by about 24 million people. The study was conducted to see if pesticides were in the waters at unacceptable rates. The study is not expected to be complete for about a year.

The study was also conducted to address concerns that, despite their large size, the Great Lakes are sensitive to the effects of pollutants because they are retained in the system. Less than 1 percent of the water flows out of the lakes annually, which could allow persistent pesticides to accumulate in sediments, be mixed back into the water bioaccumulate in the food chain, and be recycled.

Credit: GCSAA Briefing

Same Old, Same Old

by Robert C. Vavrek Jr., Agronomist, Great Lakes Region, USGA Green Section

The two most common topics of discussion during Turf Advisory Service visits this season will come as no surprise to anyone; the unreliable nature of *Poa annua* and green speed. If I had a dollar for every green that lost a significant amount of *Poa* from either winterkill or midsummer heat stress, then I could probably afford a new set of Calloway woods. Last summer, the unusually mild weather caused little if any stress to *Poa annua*. Consequently, many courses in the nine-state Great Lakes region entered the winter with a "bumper crop" of *Poa* on greens, fairways, etc. In fact, a group of courses in the northern transition zone, central to southern Illinois and Indiana, found that the percentage of *Poa* on greens increased during the winter. This came as an unwelcome surprise to a few superintendents who had made a considerable amount of progress reducing the amount of *Poa* through overseeding programs and the careful use of plant growth regulators.

Courses in the northern portion of the region were the first to experience significant losses of *Poa annua* "Crown Hydration" and, to a lesser extent, prolonged periods of ice cover caused severe injury in poorly-drained, low lying areas. Perennial ryegrass tees were also hard hit. To make matters worse, recovery of damaged areas was very slow this spring because of the cool days and cold nights accompanied by frost - conditions that persisted well into June in some areas.

Many courses throughout Wisconsin, northern Michigan, northwest Illinois, and northern lowa were affected by winterkill. Several very highly regarded golf courses were sodding entire greens this spring. Fortunately (as if there's anything fortunate about winterkill), the damage was so widespread that golfers generally took the damage in stride.

Courses in central to southern Illinois and Indiana were hit next. The mild summer last year left the impression that *Poa annua* wasn't that bad after all. Many courses entered the summer with a "double dose" of *Poa* in greens and fairways because little turf was lost from heat or drought last season. Well, take all the *Poa* that should have died last summer, add that to the *Poa* that would normally die this summer, and for good measure add a very shallow root system caused by heavy frequent rains this spring, and you have a time bomb just ticking away.

The bomb exploded around the end of July. Frequent heavy rainfall saturated the soils to a point where they became very slow to accept any more water. A heavy early morning rain followed by a sunny, very hot and humid afternoon produced ideal conditions for wet wilt in low puddled areas of greens and fairways. If the turf didn't die outright, it became very susceptible to the intense disease pressure from pythium and brown patch. Many superintendents had already used up their fungicide budget by August and had little to show for it. Active pythium was seen at 11:00 a.m. at one southern Illinois course. Losses of turf were sometimes blamed on more exotic problems such as "bacterial

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"Represent your organization with class. Nice sport clothes are required for all golf outings no blue jeans, t-shirts and the tike Sweaters or jackets with ties are recommended for all dinners and meetings. Good golf etiquette, fairness and sportsmanship are expected at all golfing events."

Same Old, Same Old. . .

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wilt" or nematodes, when simple heat stress was the more likely explanation for the injury. The take home lesson when the going really got rough, *Poa annua* died within several days while even the older varieties of bent remained in relatively good condition in spite of the heat and humidity. Often the difference between live and dead *Poa* was adequate surface and subsurface drainage.

In contrast, the summer has been relatively mild in the central part of the region this year. Most golf courses in Detroit, Chicago, Milwaukee and Minneapolis/St. Paul have not had the intense stress and severe injury experienced farther north or south. It was difficult shifting gears between visits. After all, how sympathetic could I be to a Green Committee Chairman who is disappointed about having *only* 9 to 10 feet green speeds after visiting courses for two weeks that would just like to have enough grass on the greens to slow the ball down (pure algae stimps at over 12 feet when dry).

The low handicap golfers tend to judge the quality of the greens by the conditions on the flattest, easiest green on the course. The playing conditions on the most difficult, contoured green should dictate the speed of the greens if consistent speeds between greens is desired. I know, easy to say, but very difficult to convince the better golfers who constantly compare playing conditions between courses. Of course they are invited to play other courses when that particular course has been primed for tournament

conditions. They come home assuming that all courses should be double cut and rolled each day.

Roll, did I say roll? If the greens still have grass next summer then the golfers want to know if they can roll them. Yes, rollers work, the green will be faster and smoother, but what is the price? The long term effects of rolling the variety of greens that exist, i.e., sand, soil, USGA, "modified" USGA, etc., are not known. Will the surface seal over, will grain become a problem? Time will tell, but the simpler, practical problems are real and must be considered as well.

For example, faster greens have fewer hole locations so how will concentrating the traffic into a more limited area affect the quality of turf over time? Similarly, pace of play has become a concern at many courses. Perhaps the scratch golfers can handle fast greens, but for the average golfers, 3 and 4 putts can quickly transform an enjoyable 4 1/2 hour round of golf into a 6 hour ordeal. As the saying goes, "Be careful what you wish for, because it may come true." There will always be a golfer who won't be pleased until his opponent misses that downhill putt and it rolls off the green, down the fairway and out of bounds.

I haven't given up hope because the other day a Green Committee Chairman raised this question during the visit. "Wouldn't the greens be healthier if we raised the cutting height from 1/8" to 5/32" but maintained the speed and smoothness by rolling a few times a week and perhaps rolling instead of mowing on Mondays?" Sometimes going the extra mile to communicate and educate pays off.

Amendments proposed for '94 GCSAA election

Members of the Golf Course Superintendents Association of America (GCSAA) are being asked to consider 15 proposed amendments to the organization's bylaws and articles of incorporation.

Voting on the proposed amendments will take place at GCSAA's annual meeting, scheduled for February 7, 1994, at the International Golf Course Conference and Show in Dallas, Texas.

GCSAA President Randy Nichols, CGCS, says that many of the issues are similar to the ones presented at the 1993 annual meeting in Anaheim.

In the upcoming election, however, each issue will be presented on a separate ballot. Nichols says this clearly defined separation will enable voters to express their wishes on specific issues, without having to consider any unrelated "riders".

The gist of each of the proposed amendments was hammered out during dialogue at a Delegates meeting held September 25-26 at the association's headquarters in Lawrence, Kansas. More than 60 of GCSAA's affiliated chapters were represented at the delegates meeting.

GCSAA Vice President Joseph G. Baidy, CGCS, described the meeting as "a milestone in GCSAA's history."

"I was very pleased with the excellent response and discussion from the delegates and chapter representatives," said Baidy, who served as chairman of both the Delegates Meeting and the Planning Resource Committee, which first met in May to begin deliberations of possible amendments.

"The consensus of the delegates was that these proposals go to the Bylaws Committee so that they can be brought to the floor at the annual meeting," Baidy explained. "They (delegates and chapter representatives) are going to take the information back to their chapters and request their input."

GCSAA's Standards Committee, as in years past, is serving as the Bylaws Committee for the purpose of formalizing the proposed amendments and submitting them to the board of directors for inclusion on ballots. Immediate past president William R. Roberts, CGCS, chairs the Standards/Bylaws Committee.

Sample ballots with exact text for each proposal, as reviewed by the Bylaws Committee, will be mailed in December to all voting members of GCSAA as part of the official Notice of Annual Meeting.

The basic issues to be voted on include:

- Adding six new Membership Classifications for other golf course personnel, new classifications for club officials, golf association staff members, educators and extension officers, and simplifying determination of Class B and C classifications.
- Assigning responsibility for setting dues for classifications other than AA, A, B & C to the Board of Directors.
- · Accountability.
- Updating the Organization's mission and bylaws to reflect environmental awareness.
- Changing the secretary/treasurer position to an elected office and clarifying the duties thereof.
- Naming the president, vice-president, and secretary/ treasurer as trustees of the Benevolence Fund.





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Important State Legislation Pending: Groundwater and Freshwater Protection Act

BILL NO: SB 74 and SB 675

SPONSORS: Senator George McManus (R-Traverse City) and Senator Joel Gourgeon (R-Bay City)

SUMMARY: SB 74 requires the Director of the Michigan Department of Agriculture (MDA) to develop and promote voluntary groundwater stewardship practices designed to prevent contamination of groundwater by pesticides or nitrogen fertilizers. The director shall also develop a voluntary evaluation system, such as the Farmstead Assessment System, to help farmers determine the groundwater impact potential of their farming practices.

GROUNDWATER ADVISORY COUNCIL: The Director shall establish a broad based groundwater advisory council to establish educational programs, coordinate technical assistance programs, and provide interagency coordination of groundwater programs. The council shall include agriculture producers. Local stewardship teams may be established to implement groundwater protection programs.

STEWARDSHIP PROGRAM: Those farmers who have completed an on-site evaluation and develop a stewardship plan which would be protective of groundwater will be eligible to receive grants to implement the plan and be protected from liability for contamination unless he/she is not in accordance with state or federal law.

FRESHWATER PROTECTION FUND: The fund will be established by requiring pesticide registrants to pay an annual groundwater protection fee for each product registered and nitrogen fertilizer distributors to pay a fee for each ton of fertilizer sold. The proposed fees are as follows:

Specialty (non-agricultural)	\$100 per product
pesticides	\$0.75 prev. yr sales
Agricultural pesticides	(\$150 minimum)
Specialty (non-agricultural)	\$100 per product
fertilizers	\$0.015 per percentage
Nitrogen fertilizers (agricultural)	unit of N per ton

The total fund would be limited to \$3.5 million. The fund would pay direct assistance to farmers such as cost share programs for persons implementing groundwater stewardship practices or groundwater protection rules; cost share programs for persons who notify the Director of potential sources of contamination; closure of improperly constructed wells; recycling programs for specialty and agricultural pesticide containers; pesticide pickup programs; monitoring of private well water for agricultural chemicals; and removal of contaminated soils and waters.

Indirect assistance programs such as education and technical assistance to pesticide users, implementation of on-site evaluation systems and stewardship practices, and research programs would also come from the fund.

Administrative costs to include monitoring, developing and enforcing groundwater protection rules and management of pesticide sales information, will be limited to 20% of the fund annually.

The director of MDA is required to annually seek matching general fund appropriations in amounts equal to the fees collected under this act. The section of the bill that *Continued on next page*

State Legislation Pending. . .

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authorizes the collection of fees is sunsetted seven years after the effective date of the act.

RESPONSE MECHANISMS: SB 675 is tie-barred to SB 74 and would amend the Pesticide Control Act to authorize the Michigan Department of Agriculture to respond to agriculturally related groundwater contamination by a pesticide. If pesticides are found in groundwater at a single location, the director shall assist in activities to prevent further contamination and perform an evaluation of practices. The director may require the person responsible for contamination at the site to develop an activity plan to correct the problem. If activities are determined not to be in compliance with stewardship practices, the director may issue an order to cease or modify activities on the site.

Upon confirmation of groundwater contamination in three locations exceeding 20% of the Maximum Contamination Level (MCL), or when US EPA proposes to suspend or cancel registration of a pesticide due to groundwater concerns, MDA may develop a groundwater protection rule for a specific pesticide. The Director may also determine the scope and region of implementation for that rule. The Director may also require a person to furnish any information they have relating to identification, nature and quantity of pesticides and fertilizers that have been used which may have impacted groundwater quality.

The Director may authorize persons to land-apply materials contaminated with pesticides or fertilizers at agronomic rates.

A person aggrieved by any order issued under this Act may request a hearing according to the Administrative Procedures Act.

Credit: Michigan Farm Bureau



- JOB OPENINGS -

POSITION OPEN - Golf Course Superintendent at Kalamazoo Country Club, a private 18 hole course with classic push up greens and \$375,000 plus annual maintenance.

Job description includes Golf course maintenance & budget, purchasing, clubhouse grounds and ancillary buildings landscaping, flower program, equipment maintenance, and snow removal within clubhouse grounds.

Annual Basic salary is \$40 - 60 thousand, commensurate with experience. Benefits include Insurance, Vehicle Allowance, Education and Conference Expenses, Bonus Considerations.

Requirements: 4 year degree in Turf Management preferred or 2 year degree in Turfgrass Management. At least five years experience as Superintendent or Assistant to experienced Superintendent. Must be a good communicator and have ability to hire, train, and manage staff. Experience with annual bluegrass required. Must play golf.

Position Available 1/15/94 Application Deadline 12/3/93

Send Resume to: Richard Stewart, Kalamazoo Country Club, 1609 Whites Road, Kalamazoo, MI 49008



POSITION OPEN - Director of Golf and Grounds at Grand Traverse Resort, a Jack Nicklaus Golf Community (Resort) with Bentgrass Greens, tees and fairways. USGA greens mix.

Responsible for 36 hole Championship Golf Complex, 70 acres of condominium and grounds maintenance, hotel vehicle fleet of 45, hiring and supervision of 65 employees.

Requirements: Minimum five years previous Superintendent experience; Turfgrass or Agronomy degree required.

Send Resume and salary requirements to: Director of Human Resources, P.O. Box 404, Acme, MI 49610-0404.

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Northern Michigan Turf Managers Association C/O Tom Reed 3733 Apollo Drive Traverse City, MI 49684



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