TABLE 2. Amounts of total and water leachable P in grass clippings and tree leaves when subjected to various treatments.

Grass or tree	Total P	Amount of P leached: Fresh	Air-dried	Frozen	Frozen & dried	Decomposed
	mg/kg †					
Kentucky bluegrass	4190	292	428	850	1300	—
Creeping bentgrass	4360	859	1020	1700	2550	—
Chinese elm	4470	—	1480	394	—	1160
White pine	566	—	48	52	—	25
Burr Oak	2140	—	118	87	—	130
Russian mulberry	3910	—	256	273	—	149
Sugar maple	683	—	142	176	—	92

† **Oven-dry basis.**

For a good stand of Kentucky bluegrass turf, the end-of-season dry surface biomass is around 3.5 g/ft2, or 3.5 kg/1,000 ft2. At a P leaching level of 1300 mg/kg for clippings frozen and then air-dried (Table 2), the potential amount of P in snow melt approaches 0.0042 lb/1,000 ft2. Using the P leaching rate for frozen but not air-dried Kentucky bluegrass clippings reduces this figure to 0.0027 lb P/1,000 ft2, which compares very favorably with the 0.00234 lb P loss recorded by Kussow (6) for runoff from frozen turf.

Measures of P runoff losses from turf over periods that include spring melt are rare. One study done in Pennsylvania indicated a full year P loss from fertilized Kentucky bluegrass of about 0.0047 lb P/1,000 ft2 (5). Comparing this figure with the potential P contributions from tree leaves and dormant turf (0.0027 to 0.024 lb P/1,00 ft2) reveals that at least one-half the P in runoff water from home lawns is not directly derived from fertilizer.

CONCLUSIONS

Due to the high solubility of P in tree leaves and frozen grass, home lawns contribute P to storm water regardless of whether fertilizer is applied or not. The flushes of P in late fall and in snowmelt from turf likely arise predominantly from the plant residues present. Rough estimates made here suggest that elimination of P fertilization of turf could, at best, reduce lawn runoff P by 50%, but indications are the the real figure is considerably less. In the long run, banning application of fertilizer P can be expected to lead to thinning of turf stands, accentuated runoff, more sediment loss and an increase in the total P load in storm water.

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May 12, 1995

Mr. Monroe Miller
Blackhawk Country Club
P.O. Box 5129
Madison, WI 54494-5125

Dear Monroe:

I just received a copy of your "Conference Comments and Questions" and wanted to respond.

First, I was very glad to see you praise the job that Joe Baidy did as President. I heartily agree that he did a terrific job. That is never easy, but it is especially notable at a time when members' expectations are much higher than their trust. I just hope that I can do as well, and merit high marks in your column next year.

I also wanted to respond to your comments on the industry partnerships and rising costs of the GCSAA Conference and Show.

These issues may seem separate, but actually, they are very closely tied. For this discussion, let's set aside the travel, hotel and food costs, because they depend on where the person is coming from, his or her personal tastes and so on. Let's just look at what GCSAA is in charge of: the tournament, the pre-conference seminars, the Conference and Show, and its many special events.

There are three ways to pay for these programs: membership dues, fee for service, and non-dues revenues. For years and years, GCSAA membership dues moneys have subsidized the tournament, even though the subsidy was indirect, such as staff time and other allocated expenses. Likewise, the Opening Session and Reception, the Banquet and Show and other special events have benefited from subsidies that eventually trace back to member dues.

The current Board of Directors' position is that we will not use membership dues to subsidize events that do not benefit the full membership — except in the case of education. We believe in plowing those dues into programs and services, and the survey show that the overwhelming majority of members

GCSAA is dedicated to serving its members, advancing their profession and enriching the quality of golf and its environment.

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agree. By wide margins, they tell us that they would rather have industry partners pay for special events, as opposed to draining the dues or charging user fees high enough to really make the events break even.

Thanks to the Textron Group's partnership, the Banquet and Show broke even for the first time in many, many years. Dollar figures for the partnership contracts are strictly confidential, but I can tell you that it took a very large sum to climb out of that hole. Clearly, industry support paid for much more than the drinks in accomplishing that turn-around.

The dues money that used to make up the difference between what you paid for your banquet ticket and what the banquet really cost can now go to programs on public relations, the environment, education, technical information services, career development and more. In my book, that is very much a good thing. The Board of Directors is solidly behind industry partnership opportunities like these. I hope you understand how these partnerships allow us to do much more for our members than would otherwise be possible.

In summary, I agree whole-heartedly that costs are too high. Our desire to keep costs down is real, and our staff makes a habit of challenging every expense to get the most value for every dollar. At the Board of Directors meeting last week, we approved the largest budget in GCSAA's history — with no plan for a dues increase. Without our industry partners coming to the table, we would never have been able to expand and enhance our programs and services the way we are. With their support stemming the flow of dues money to cover special events, we can commit significant resources to achieving our mandates in the areas of image, the environment and chapter relations. I am proud to point out that our members have enjoyed five years with no dues increase, and will enjoy more. (Five years may not seem long, but just imagine going from 1990 to 1995 with no increase in pay.)

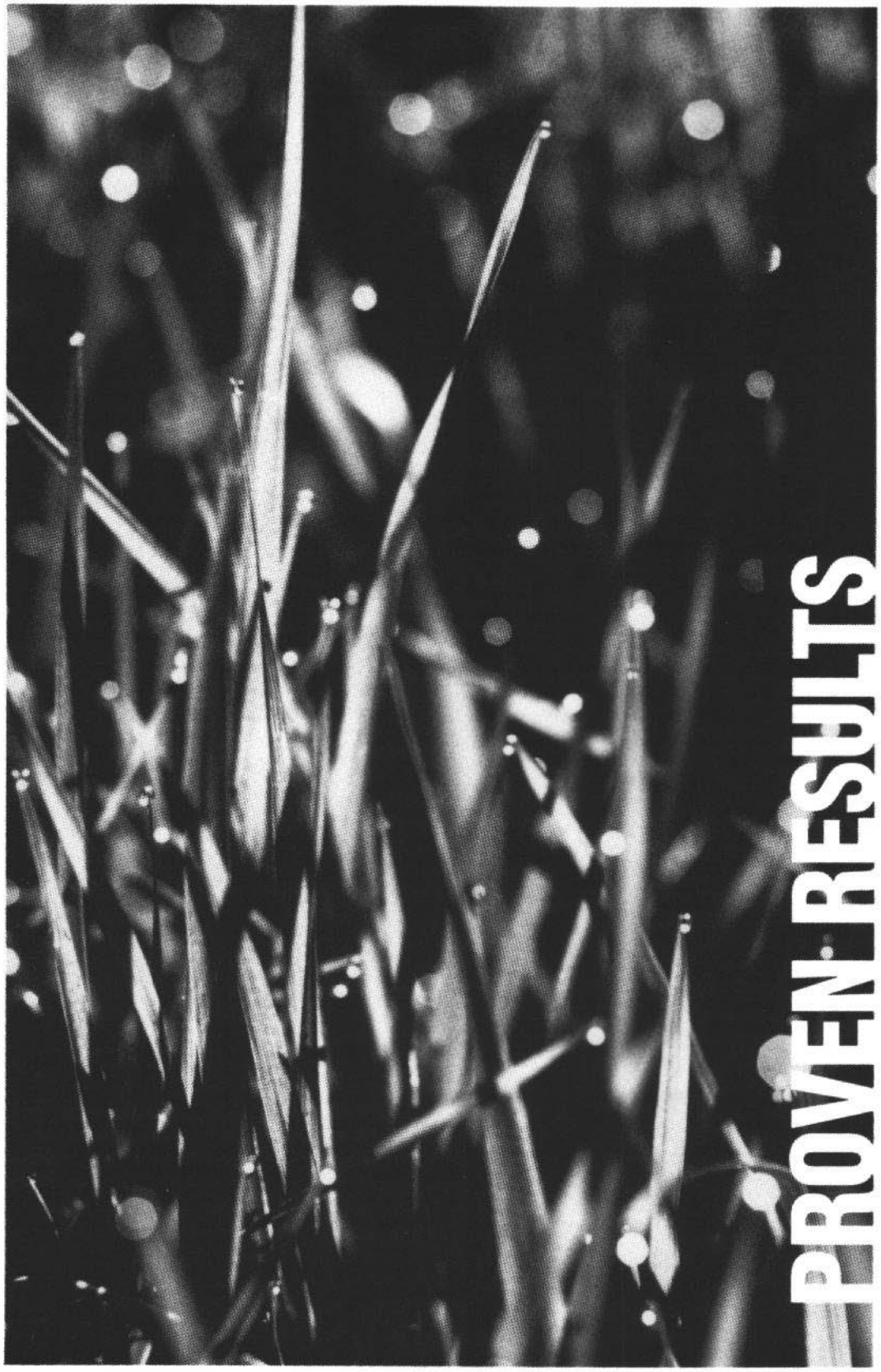
As always, please feel free to give me a call anytime. You are an excellent "watchdog" for our association, and that deserves a lot more credit than usually comes with the job. I'm always happy to respond to any issues you may raise. As I am sure you are aware, Director Tommy D. Witt, CGCS, will be heading up to Hartford, Wisconsin, later this month for a Speakers Bureau engagement. Tommy also could offer you further clarification, if you want.

Sincerely,

Gary T. Grigg, CGCS
President

GTG:cjh

cc: GCSAA Board of Directors



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A Competitive Spirit

By Lori Ward Bocher

John Buck loves competition. You can see it in his hobby. "I have only one hobby, and that's golf," says this owner of JW Turf in Hampshire, Ill., and Pewaukee, Wis. "I like the competitiveness of the sport. It's a competitive game that's a lot of fun because, with handicaps, you can play with anyone, no matter what his ability. There's no other game like that."

He also enjoys competition in business. JW Turf sells a complete line of John Deere golf course and turf maintenance equipment. "We've been growing at a rate of about 25 percent a year since 1989 or 1990," John says, adding that the growth is due to a larger share of the market.

How does he get that increased market share? "For one thing, John Deere makes quality equipment," John answers. "And we strive to give a little better service than the competition in every way. I mean, total service to the customer, whether it be fixing his equipment or parts availability or just doing what we say we're going to do and being honest with people.

"You have to have the product," he continues. "But just about anything will cut grass. You know that and I know that. I really think the service means more than anything. It's building a relationship with your clients, building up some trust."

Setting up shop in Pewaukee about a year ago helped build that relationship with Wisconsin clients. "We've always done some business in Wisconsin, but we never had a location up there until we bought out a small John Deere consumer products dealership, Kruegers Lawn Capitol on Capitol Drive," John explains.

"Since our location up there, business has more than tripled in Wisconsin," he adds. "I think people feel more comfortable about buying from us when we have a location up there. And I like working in Wisconsin. Wish I was up there full time myself. Wisconsin is a little more laid back. The superintendents are very nice people to do business with."

John's first exposure to golf was when he was a high school student and worked on the grounds crew at Silver Lake Golf Course in Orland Park, Ill. "It was a part-time job, after school and on weekends," he explains. "That's how I got started playing golf."

Not counting that brief exposure to turf work, he's been in the turf business for less than 10 years. But he's been with John Deere since 1970. And he started working with farm implements long before that.

Born in Lockport, Ill., John was raised on a farm, graduated from Lockport High School, and studied agriculture at Joliet Junior College. But he never became a farmer. "After Junior College, I spent a few years in the Navy," he recalls. "Then I worked for a farm equipment dealer in Plainfield, Ill., for about five or six years."

In 1970, he became an entrepreneur when he and a partner purchased John Deere dealerships in Oswego and Sheridan, Ill. "It was something I had wanted to do for a long time," he says of the purchase. "We bought each of them on a 50:50 basis, so we each owned half of two dealerships. I worked at the one in Sheridan. It was almost all farm business at the time."

In 1977 he sold the Sheridan dealership and bought another John Deere dealership in Huntley, Ill., which is about 50 miles north of Sheridan. "And in 1979 we moved a short distance to Hampshire and built a new building," he recalls.

"At that time, we were a farm implement dealership and a consumer products dealer for John Deere," he continues. "But in 1986, Deere announced it was going to get into the golf course maintenance business. They were looking for about 40 distributors in the United States to handle their golf course equipment. I was interested in that. We had to do a marketing plan, and we were lucky enough to be awarded a contract in 1986.

"I put my son-in-law in charge of the farm implement business, and I then took over the new venture, JW Turf," he explains. For six short months John had a partner named Walter, which is why the business is named "JW Turf". "We dissolved the partnership but I kept the name because it was easier than changing it," John points out.

Located near Interstate 90 about half way between Rockford and the greater Chicago area, Hampshire has

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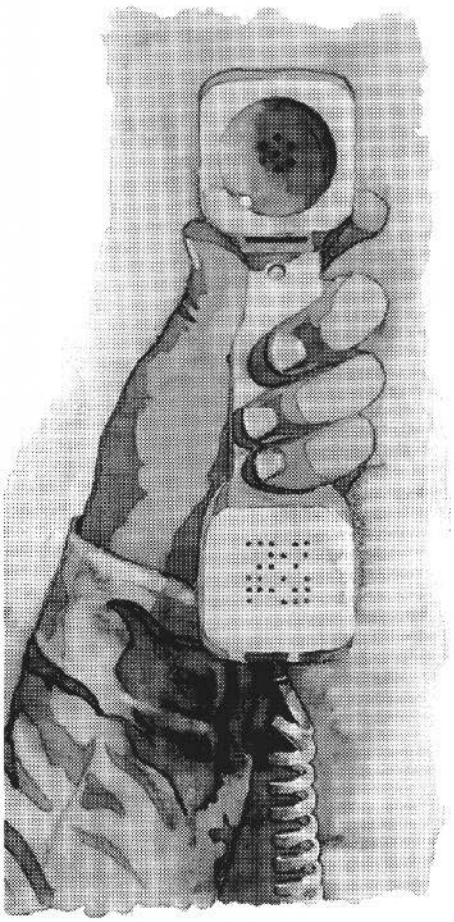

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seen much urbanization in recent years. "Chicago is getting very close," John says. "When we came here in 1977, about 90 percent of our business was in agriculture. Now, with our consumer products business, skid steer business and turf business, agriculture is probably no more than 25 percent of our business. It's changed a lot."

JW Turf is able to capitalize on that increased urbanization with its complete line of John Deere mowers and other golf course and turf maintenance equipment. "The golf course business is a whole lot bigger than anything else," John points out. "I'd say it amounts to 65 to 70 percent of our turf business now."

From the Hampshire office, JW Turf covers the northern third of Illinois, from Peoria north. And, from the Pewaukee office, they cover the southeastern two-thirds of Wisconsin. At the two locations combined, JW Turf employs seven sales people, four shop people, two parts people, two office people, and John.

John has seen lots of changes in golf course maintenance in the past 10 years. "Members are getting a little bit more picky. They want their courses to look nicer," he says. "There's been a tremendous change in the way superintendents take care of their golf courses. They're forced to have better equipment so their golf courses look nicer and are marketable."

How does a company like John Deere respond to those changes? "Once a year John Deere invites about 500 superintendents to a feedback seminar," John explains. "These superintendents get to critique some of the new test equipment that John Deere has out. Plus, they get to sit down with the engineers and tell them what is needed in the marketplace and what's needed in the future. Deere's been doing that for about the past eight years, and it's helped quite a bit." John attends the seminars, too.

Since golf is John's only hobby, he likes to play two or three times a week when weather permits, and he plans winter vacations around golf destinations. "I belong to a couple of country clubs. But, being in the business, I get to play a lot of courses," he says. "And, when I play, I pretty much notice what kind of equipment is on each course."

Spoken like a true competitor!

Quest For The Holy Grail

By Bob Vavrek
USGA Green Section Agronomist
Great Lakes Region

The superintendent's quest for ways to eliminate or control *Poa annua* has reached a fever pitch this season. Only a few localized areas in the north central states experienced winter related injury to turf. Unfortunately, where damage occurred, it was quite severe. For example, considerable losses of *Poa annua* and perennial ryegrass were the result of frequent freeze/thaw cycles during December and again during mid- to late March in the Minneapolis-St. Paul area. Turf covers, even the thick excelsior blankets, failed to provide the degree of protection superintendents have come to expect in the Twin Cities.

The rest of the region generally experienced a mild winter followed by a cool, wet spring — ideal *Poa annua* weather. It blossomed with an abundant crop of seedheads during May, much to the ire of golfers and superintendents alike. As a result, a number of superintendents, newcomers and old-timers, have pledged that they will dust off long lost containers of Embark next spring and really show that *Poa* who's the boss. After all, Embark is a Type I growth regulator, and it didn't get to be #1 for nothing.

Thinking back on all the Turf Advisory Service visits made to northern golf courses during my USGA experience, I can count on one hand the superintendents that really feel comfortable using Embark to control seedheads; in general, these are some of the most experienced superintendents I know. Timing is critical. Treat too late and you'll get no effect; treat too early, then experience a hard frost, and you and the golfers will see stunted, severely discolored *Poa annua* for quite some time.

Think about it; if Embark provided a simple, risk-free method for seedhead

suppression, then most superintendents would be on the program each and every spring. Is the risk of injury or discoloration worth the potential benefits of seedhead suppression? Only you can make that decision. Read the label carefully, talk to those with experience using this material, and perhaps, try a practice run on a small area next spring before treating 25 to 30 acres of fairway turf. I would rather not cancel my annual late April fishing trip to Montana next year because "I honestly thought I had more bent in my fairways." But if the need arises, I can always fish during October.

Along the same lines is the other most frequently asked question this spring: "What growth regulator should I use to reduce the amount of *Poa annual* in my greens?" Often the question comes from a superintendent who frequently double cuts at or below 1/8", rolls greens two to three times a week, keeps the greens quite wet, and makes numerous application of fungicides throughout the season to protect the *Poa*. Why try to control *Poa* with chemicals when the entire management program is designed to encourage the grass you wish to eliminate?

Take the argument one step further. Why try to discourage *Poa* on heavily shaded greens? It is probably the only species adapted to wet, shaded sites, in spite of its shortcomings. If you eliminate *Poa* from a shaded green, the result will likely be a thin, weak, coarse textured stand of bentgrass. The bottom line is that *Poa* control would take an integrated effort — irrigation management, drainage, adequate sunlight, overseeding, aerification, limited fungicide use, a reasonable height of cut, and yes, then perhaps careful use of a growth regulator. Groom for *Poa*, then try to control it with growth regulators and the result is likely to be a thin, ugly stand of bentgrass.

An informal poll of USGA agronomists from around the country indicates that we have never seen a well documented case where the superintendent took an old push-up green that had a 50/50 bentgrass and *Poa* stand of turf, and then significantly reduced the amount of *Poa* for more than a year or two, using growth regulators. Yes, success can be documented for a year or two, then comes a mild winter followed by a cool, wet spring, and the *Poa* returns to the green with a vengeance. The end result is "back to square one", only now much of the *Poa* is the weak, full-of-seedhead annual biotype. It has happened time and time again; temporary success, high hopes, and then mother nature shows everyone who is the boss.