

Entomophaga maimaiga. It has been effective in killing the caterpillars. When the caterpillars die their corpses contain millions of spores which, when ground up and diluted, can be spread around trees in infected areas and used to fight the next hatch of caterpillars. Two insect pests are being tested; one is a parasitic wasp most of us have read about.

Another potential control involves the use of pheromone flakes. The flakes are spread about in an infested area and the scent so totally confuses the males they are unable to find mates and reproduce.

Gypchek, a virus, is specific to gypsy moths and it is being tested in some areas. A low tech approach involves wrapping burlap bags around the base of the tree trunk. The burlap traps the caterpillars as they crawl down

and the egg sacs are deposited.

I absolutely fear the potential damage gypsy moths could cause on Wisconsin's golf courses. But I also find comfort in the research being conducted by the UW - Madison and WDATCP, in cooperation with other states. One has to believe they will eventually find an effective and safe solution that will bail us out.

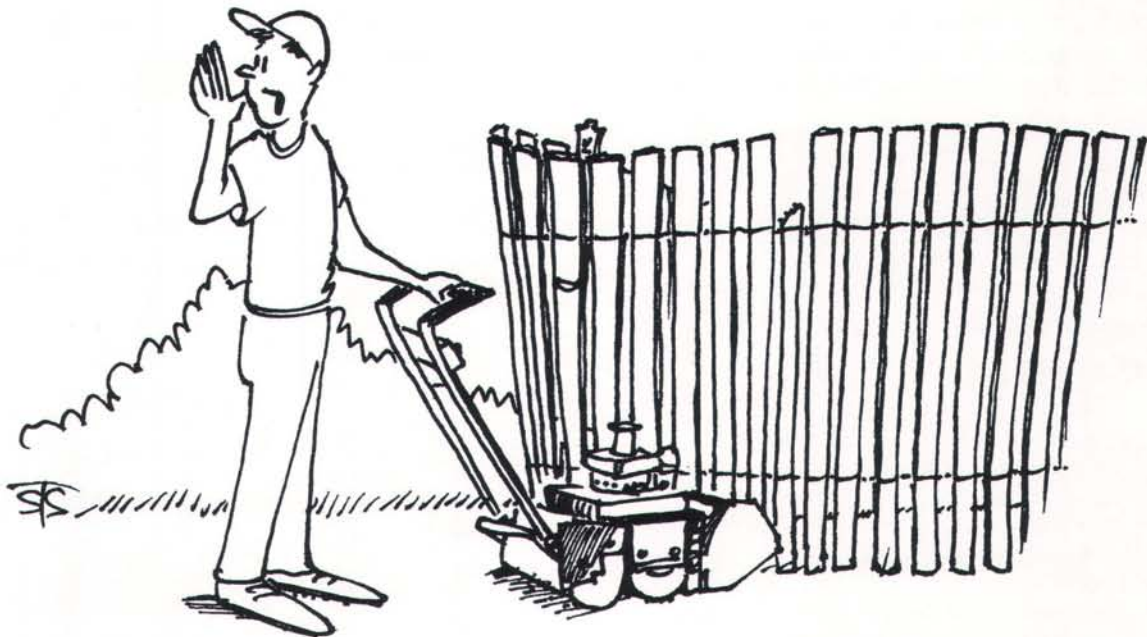
In the arena of bigger pests, the UW - Madison CALS and Cornell University have cooperated on the publication of a guide called *Managing Canada Geese in Urban Environments* that details legal and effective ways to get geese to go elsewhere. One of those ways is the use of dogs trained to patrol for geese.

You can get a copy for \$10 (order # 1471B243) from Cornell

University Media and Technology Services Resource Center, 7 Cornell Business and Technology Park, Ithaca, NY 14850. Phone 607-255-2090.

When you see him, give Dr. Chris Williamson a warm Wisconsin welcome. He is the new UW - Madison turf and ornamental entomologist and has already joined the *Grass Roots* staff. You are going to like him! He is at 246 Russell Labs, 1630 Linden Drive, UW - Madison, Madison 53706. Call him at 608-262-4608 or fax him at 608-262-3322 or e-mail him at rcwillie@entomology.wisc.edu.

That's all the news that's news from the editor's desk. Have a great spring; don't let it pass without pausing long enough to enjoy it.



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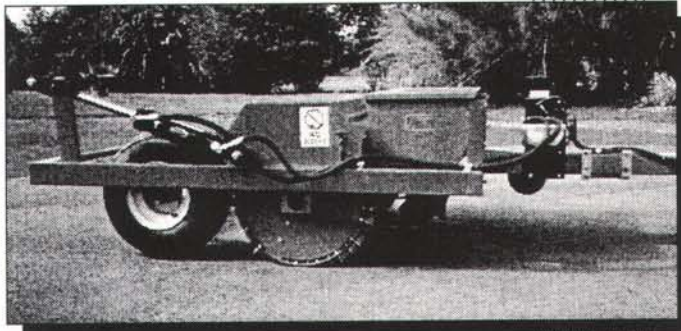
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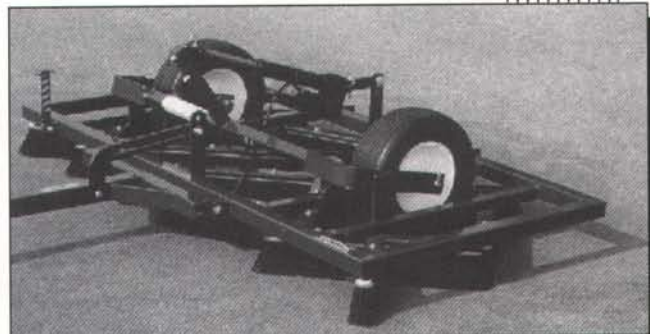


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Ten Tips to Make GCSAA Conference and Show Better

By **Monroe S. Miller**, *Blackhawk Country Club*

Each year, during the USGA Green Section's conference, turf tips are offered from the agronomist staff. There has never been a year when I didn't take advantage of several of those tips.

In the spirit of the turf tips for golf course superintendents, I offer ten tips to GCSAA officials that I think will make the next conference (and those beyond it) better. They are offered in a constructive spirit.

1. Eliminate corporate sponsorships. Here is a fact: people in the audience tune out the pitch that goes on before a lecture, like the innovative superintendent sessions. The simple food provided is inexpensive and most of us can afford to feed ourselves. The constant selling, which even goes on during the opening session, numbs people. Quick quiz: Name the sponsor of the opening session. My point exactly.

In addition, corporate sponsorship hasn't resulted in lower conferences expenses or reduced dues. I see no benefit, other than a freebie lunch for the CGCS crowd and prizes for the tourney participants. I'll take cash, please.

2. Eliminate ALL preferred seating. If you want to sit up front - opening session or banquet - get there early. It is not a difficult concept and it is certainly more fair than the current elitist system.

3. Design a pocket program that even the simple minded like me can understand. The booklet for this year was anything but

handy or convenient. I was with a guy who was so frustrated with it that he tossed it after being unable to find a room location. Also, print booth numbers for the show floor big enough to read or issue a magnifying glass with each booklet.

4. If there are association activities in the convention center, make sure there is food available. At least one lunch stand should be open in the lobby area. And tell people where that lunch stand is located.

5. Check out all A/V equipment the day before it is to be used. Have back up equipment available right in each lecture hall. No more excuses.

6. Preview all lectures and their presenters. Apply the hook to those that don't measure up, that are too long, or that are off the subject. Poor quality remains a problem.

7. Schedule rooms that are big enough. Those convention centers we now seem to be forced to visit are all cavernous. There should be no excuse for people

not finding a place to park themselves. I hate standing along the wall on the sides or at the back of the room.

8. If GCSAA is going to be in the travel business, then negotiate some respectable room rates. It is maddening to see a better room for half the price closer to the convention center than the one we were assigned to by GCSAA. It defies logic.

9. Enhance conference education without making it necessary to buy a seminar. There has been a gradual erosion, in my opinion, in the free conference educational program, and a fattening of the "for a fee" seminars. There seems to be a loss of the sense of what the conference should offer.

10. Hire a superintendent or disguise a staff person as a superintendent and have that person participate fully in conference activities. Have this individual take notes and report on what frustrates members at conference. It would save chapter publication editors the task. Thank you. ♻



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What Environmental Stewardship Means To Me

By *Gordon Waddington, Country Club of Wisconsin*

I don't know if having the golf course I manage become a Certified Audubon Sanctuary in 1996 by Audubon International's ACSP for golf courses or winning an award for Environmental Stewardship in the Midwest regional - Public Division has improved the golf course; it depends on who you talk to. Speaking for myself, I feel it helps take the game back to its roots a little and go against the Americanized standards we have seen affect many of our fine golf layouts; to me, that is fun.

I am not sure if I've finally reached maturity in life or if I am going through a mid-life crisis or both, but at 41 years of age I have finally had feelings of satisfaction overwhelm my outlook on life and work. Recently I have been able to categorize what is important to me and why. And money is NOT one of them! I congratulate those who have reached this point earlier in their lives than I did. It is a rewarding feeling. Something has made it all come together and I think I know what it is, but I am not sure it improves the golf course.

I do know that my wife and our three children are the most important priorities in my life and that being a golf course superintendent is a distant second on that list. This article is about that second priority and the personal satisfaction of being recognized as an environmental steward, and how that recognition has enhanced my feeling of success.

I am honored to know a lot of golf course superintendents in Wisconsin and elsewhere around the country, and I can say that I believe we are all environmental-

ists. That begs the question: why apply to get a piece of paper - an award - that confirms what you have been doing all along? It is for your club, your community, and maybe most importantly, it is for you. Let me tell you how I feel the honor about this distinction and how it has changed my outlook about my job and my life. An environmental opportunity like this shows that one can make a difference!

We all know too well how little recognition we receive for our efforts in creating that perfect turf for a golf game, to the point where an occasional pat on the back feels really good sometimes. We are only as good as our last season or our last project, a trite saying among us that is actually true. That can be discouraging. But we are the only ones who can change the way we are perceived. It is not the name you are called, but the name you respond to that matters most in defining who you are. Recognition as an "environmental steward" has given me weight in defining myself.

Maybe you have found another way of defining yourself. Don't keep it a secret! Environmental stewardship and the Audubon International programs have satisfied, for the most part, my desire to give something back to the industry, the professors and the superintendents who have helped make my position rewarding to me. If this award helps advance the perception of any golf course superintendent, then I have had a positive impact.

It has also helped promote my position as superintendent of our property with the owners and

management company. Even if this award only means another marketing opportunity for them - a chance at increased revenues - then so be it. I cannot blame them for that; it's their right and their job! I just thank them for the autonomy to promote the programs I do and the funds to support them.

Finally, these programs have created a positive image in the community. We have kept the "good faith" agreement the owner promised the township and the neighbors who complained about runoff contamination, worried about wells drying up, and were concerned about water being poisoned with pesticides. Let me get them a glass of water to swallow that "golf course is good" pill we are making them choke on now! You can probably sense a little bit of anger, and probably relate to it. Becoming "recognized" as an environmental steward has helped release that anger and has made me a better person and a better superintendent.

You might be thinking, "Boy, now the pressure is really on not to make a mistake, especially an environmental one." Well, bring it on! All the environmental efforts we make are all common sense, and golf course superintendents have lots and lots of common sense. That is why we have all felt that we are environmentalists. That is the fun and easy part of the job!

Professional satisfaction from the recognition is one reward, but I feel the most rewarding benefit is the personal satisfaction it brings. You cannot depend on owners, green committees or boards to create happiness for you. They can

only provide you with the resources you need to do that for yourself. You have to create your own happiness at work. We are all lucky enough to actually have the physical opportunity to change the environment for the better.

It makes me feel I have made my college professors at UW-RF proud. It makes my mom proud since she was the one who took me to the Schlitz Audubon Sanctuary on Lake Michigan so often, hoping to make me understand that nature is a great cure for the stresses of daily life. She took me there to enjoy nature and appreciate all of its beauty.

We all know that rewarding feeling we experience when we have a golf course in peak condition and wish we could have all of our colleagues there at that time. I have learned to also enjoy watching butterflies and birds never seen before on the course, to appreciate perennial beds that required lots of work to create, and to watch 50 acres of Little Bluestem grow and mature and change colors throughout the season. Baby bluebirds, a mother goose and her goslings, frost on the prairies, and a hundred other things that have come to me as a result of the stewardship program and the Audubon program; they are the things that mean a lot to me now days.

Like I said before, if there was a way to add to the bottom line with these things, superintendents would be perennial heroes. But to my wife and my kids, I am already a hero of sorts and they are the most important people to satisfy. And I feel darn good about my contribution, too. I am really glad I am not held accountable for bringing in revenue from that extra beauty of nature we have created, and I am glad I am not looked up to as the most important employee at our property (that's the person who takes the money to the bank!) because it allows me to be selfish

with my "little secret" called total happiness with my job. Being a superintendent allows me the freedom to enjoy what I got into this business for in the first place - living and working outdoors. My only concession is I have to put up with

30,000 human beings whacking around a little white ball on the manicured part of our property. Thank goodness the manicured part is only 100 of the 217 acres where I can go and "work"! ♣

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A Changing of the Guard

By Pat Norton, Nettle Creek Country Club

Boy, oh boy, do I have an interesting story to tell this time! This one is basically a season long soap opera...which every golf course/golf club seems to go through from time to time. Isn't it right that some golf seasons fly by with only the usual happenings...disease outbreaks...hydraulic hoses bursting all over a green...or spectacular thunderstorms/subsequent flooding?? You know, the normal catastrophes associated with any golf course...which is pretty tame stuff compared to the problems humans cause for one another!

Every so often the situation develops in which a golf operation goes through the proverbial season from hell...and I'm not talking about problems on the golf course!

The 1998 season for us started with extremely high hopes. We had started our new clubhouse construction in late fall of '97... and been assured that the new building would be ready for the start of the next golf season...by our very seasoned architect/general contractor team.

These guys did have tons of experience overall...but no experience with designing or building golf clubhouses! We could have found somebody that knew how to design such buildings...or checked into the pre-built clubhouses advertised in GCM...which I advocated as a great idea!

However, my input throughout this whole thing was extremely minimal. We already had quite a few 'chiefs and armwavers' involved, you see...so I was unofficially given an 'Indian' sort of job description in this affair...which I soon morphed into an 'absent, uninvolved' sort of thing.

Besides...everybody else seemed to be real experts...and the golf

course did need some attention that spring...so I excused myself from the whole thing and watched the drama unfold.

Construction of our new clubhouse proceeded oh so slowly...don't they always? And in addition to the normal glitches that delay completion...it became apparent that the design and construction were a little more 'high end' than some of us had envisioned...lots of expensive false dormers, false windows, and steep roof pitches that make the building look spectacular...and definitely more expensive!

And what looked to be a very beautiful building from the exterior soon turned out to have a most tiny interior...and a theme in the restaurant of 19th hole/fine dining/ill-defined/late 20th century/rural Illinois elegance sort of thing...in which the ultimate style/atmosphere turned out to be fine dining with linen for lunch and dinner...gradually evolved...when it was originally intended to have a casual atmosphere for golfers and the general public!

Obviously...with our themes and operating philosophies so very well defined...it was just a matter of time

before this thing caught on... Oops, I almost forgot...spearheading the whole clubhouse design and operation thing from our ownership group was a husband/wife team whose elegant ideas, tastes, and styling...were precisely what we did not need!

This couple was the wrong two-some in the wrong place at precisely the wrong time...as far as I could see.

Unfortunately, their ideas and authority were given tacit approval from everybody else...especially after it became clear that our newly hired club manager couldn't work with them at all...and left our employ after only a few short weeks!! Hey, hey, we're really on our way to clubhouse success now...and best of all this whole messy wound was just starting to get infected!

That helpless feeling is one that I'm sure all veteran superintendents know well...having quite a bit of observational experience at different places over the years...we feel that we've seen what works and what doesn't, right??

Who hasn't seen some hare-brained, halfbaked, entirely wrong house idea, theme, or proposal gain approval from a board of directors...while solid ideas for improve-

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ment of the grounds or the golf course languish for far too long?

And who hasn't had that feeling of knowing that something is just entirely wrong...only to fully realize that you're in the distinct minority and in no real position to speak your mind? All of these things happen everyday...in the golf world...and the business world in general, I guess.

So as last summer progressed, it became increasingly clear that our fancy, linen bedecked clubhouse/restaurant was on entirely the wrong path. We were alienating our bread and butter golf patrons...that heretofore loved us in our double wide mobile trailers...serving up cheeseburgers...beer...great hospitality...and solid public golf! We were serving maybe 30 dinners on any given Saturday night...far from the numbers and dollars projectebly our supremely confident management duo.

It then became a very cynical, negative game of sorts to attend our monthly board meetings from about August through the end of the '98 season. John Keegan and I knew that we had problems...heck...everybody sitting around the board table knew that we had problems...big problems. The biggest problem of all was that nobody, but nobody in the ownership group was willing to take on the fight of getting things changed...of having to literally and completely fight it out with those two who advocated the status quo!

Business partners, I have learned, will go to extreme lengths to back each other up...to not step on toes...and to get along almost all costs. In this group at least... we had many situations crop up in the last five years... in which management (us) had to yield to the owners (them) in numerous different ways. This clubhouse thing was the supreme example of that operating philosophy.

The decision was made that, as a group, we should five this idea of fine clubhouse dining/stiff, formal

atmosphere until the end of calendar 1998 to succeed. So after limping through until the end of the season... and our older owners fully realizing that once the golf course closed...there was almost no other restaurant business to be had...we closed the damn thing for the winter! Point proven!

But what a moot point to say amongst ourselves that we were indeed correct...public golfers don't really want things too fancy or high priced! And they let us know what they wanted by not patronizing our fancy restaurant...we just didn't really ever get the message!

So we then...by December '98... had a losing restaurant proposition complete with terrible financial figures, suspicion of employee theft, horrible employee morale, charges of sexual harassment, an extremely unhappy golf professional/general manager who never really got to see his family, and an ownership group that was starting to get very anxious about our collective future...all in all a pretty successful first season with our new clubhouse, eh??

Really the most stable, depend-

able part of the entire operation was the good old golf course! Yours truly was never a part of any of the BS going on up there...and believe me my uninvolvement was entirely intentional! I had the easiest job of anybody there! I could just simply shake my head at the wasted money in there and head back outside...which I'm sure is also a common thing amongst superintendents. I was so uninvolved as to later be called naive when the truth began to surface concerning the variety and depth of our problems.

Much better though, to be naive than guilty...which is so easy to say as I sit here and reflect back on the season and its roilings...its boilings...and the cancer that seemed to eat away and destroy so much of the good progress that was made here over the years.

Our group now is inevitably going to break up...which leaves me with mixed feelings. My good friend John is leaving the club...wanting some freedom and a chance to make more money.

One of our existing owners is buying everybody out...which will be great for me in that he's my

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1999 MEETING SCHEDULE

<u>DATE</u>	<u>LOCATION</u>	<u>SPEAKER/TOPIC</u>
April 26 (Monday)	Lake Arrowhead G.C., Nekoosa, WI Joe Fryman, GC Superintendent	Dr. Chris Williamson, UW-Madison Entomologist
May 10 (Monday)	Green Bay C.C., Green Bay WI Marc Davison, GC Superintendent	Steve Davis, Agrevo "Poa annua Control"
June 7 (Monday)	Ozaukee C.C., Mequon, WI Wayne Otto, GC Superintendent	No Speaker
July TBD	Bull's Eye C.C., Wisconsin Rapids, WI Mark Kienert, GC Superintendent	Dr. Don Taylor, "Late Fall Topdressing"
August 10 (Tuesday)	WTA Summer Field Day O.J. Noer Facility; Verona, WI	
September 13 (Monday)	Washington County G.C. Hartford WI Mike Kactro/Dave Jahnke, GC Superintendent	WGCSA Tournament
October 12 (Tuesday)	North Shore G.C., Menasha, WI Scott Schaller, G.C. Superintendent	Bob Vabrek, USGA "Year in Review"

father's brother...is interested in owning/improving the course for the long run...and feels that having a stable, experienced superintendent is of paramount importance.

I did capitalize on the situation by regaining my independence of sorts. The initial idea was to have the superintendent report through the general manager to the new owners. I guess I balked enough at my prospective continued involvement...given my age and experience...as to convince them that if they wanted me to remain in my position...I would need to be able to report directly to the majority owners. Otherwise, I definitely told them that I would not be staying on and would return to Wisconsin and otherwise pursue other opportunities.

So I guess they blinked before I did...which was good. If they hadn't, I might be keyboarding my resume today instead of boring you all with the seamy details of this tawdry tale!

You know, the only difference between any superintendent reading this and myself...is that I have the benefit of writing for a removed audience of Wisconsinites. I am reasonably confident that any

greenkeeping veteran has equally interesting stories to tell...but cannot candidly do so because of his own proximity to his reading audience.

In other words...people that might be offended by these words will never read this...I would suppose.

I had a new friend from Wisconsin write to me concerning my previous column about being at a crossroads in my career...and I must say that it impressed me that he'd taken to heart some of my written words. Many of us have experiences very much in common...and lots of the same reaction and opinions...and it's much more interesting to read about this type of thing rather than the latest and greatest in the turf world proper!

And I do admit to the satisfaction of writing precisely what I feel...and having other superintendents identify with it...even if I didn't have the guts to say precisely what I felt about this past season here at Nettle Creek.

One last thought...within our new and reformed management group at the golf course...there's quite a bit of discussion about the relative need for a PGA Class A golf professional

this season. The mutual feeling is that we have the trained staff to cover the bases of the golf operation...although that idea may be somewhat shortsighted, I think.

Throughout the discussions, though, nobody ever talks about being able to operate without a trained, experienced golf course superintendent!

I think that the powers in this great game continue to realize that modern superintendents are vital to any golf course operation...but usually not to the point of equal compensatory consideration with our friends in the PGA.

I also believe that the more a guy can demonstrate his understanding and competence of the business side of golf...by starting with more collegiate and GCSAA sponsored business training...and continuing his business/computer education wherever possible...we'll be taken more seriously yet.

Then...whenever there's a changing of the guard...the superintendent will be considered equally with anybody else for that position.

Which is the way it really should be. ♣

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Managing White Grub Infestations

By Mike Villani, Jana Lamboy and Pat Vittum

Editor's Note: We went back to the East Coast, back to Ithaca, New York and Cornell University for some advice from across the country. This article, relevant as we prepare for the new golf season, appeared in Vol. 9, No. 2 issue of CUTT and is reproduced with permission from editor Dr. Frank S. Rossi. The article spends time addressing the value of mapping insect problems, a subject Dr. Villani lectured about at a Wisconsin Golf Turf Symposium a number of years ago. The principles are reinforced in this article.

White grubs found in turfgrass are the immature forms of several kinds of scarab beetles. In high populations they can cause serious damage to lawns and golf courses. Late summer scouting for grubs in the soil below turf is the best way to determine where treatment is necessary. Treatment can be done while the grubs are small and susceptible to management, before heavy feeding begins in late September. Japanese beetle and European chafer grubs are the most important turf insect pests in New York State. Both species have life cycles that are similar in terms of basic biology and time windows of sensitivity to biological chemical controls.

Japanese beetle grubs overwinter as a third instar larva in the soil below the frost line. In spring, they move up in the soil to feed on roots, then pupate for one to three weeks within the cast skin of the grub. As the insect matures the cover splits and the adult beetle is ready to emerge. Japanese beetle adults crawl out of the ground in late June

and early July. They can fly as much as a half a mile a day. The adults feed on the foliage of over 300 different species of plants. The beetles mate, and females are ready to lay eggs about one week after emergence. The female beetles lay 40 to 60 eggs in the soil over a two to three week period. Eggs hatch within two weeks into first instar and feed on roots for three to four weeks. These grubs molt and become second instars that feed for three to four weeks. The grubs molt again to become third instars by the middle of September. They continue to feed until they reach full size before winter. As temperatures drop in the autumn, the grubs migrate down in the soil.

European chafer grubs have an annual life cycle similar to Japanese beetles except that they feed later into the fall and start feeding again during warm spells in the winter. European chafer adults usually emerge slightly earlier in the spring than Japanese beetles. European chafer adults emerge at dusk and are attracted to light and vertical objects in the landscape, often forming large swarms around small trees. Adult European chafers do not feed, staying above ground just long enough to mate. Mating pairs of European chafers fall from the trees and crawl back into the turf where females lay several dozen eggs over several days.

Mapping Grub Locations

Intensive sampling of ten golf course fairways and roughs on two golf courses in Central New York from 1995 to 1997 allowed us to map the location of Japanese beetle and European chafer grubs. These maps suggest that there are

extreme fluctuations in grub populations from year to year, and that years that are favorable for one grub species may not be favorable for a second species. There are clear differences in where we find the various grub species on this fairway: European chafer grubs are found predominately in the rough areas and Japanese beetles tend to prefer well managed irrigated turf-grass that is close to vegetation suitable for adult feeding. They appear to prefer loamy soils in full sun. By comparison, European chafers are found in lower maintenance turf sites, without irrigation, and with sandy, well-drained soil textures. They are also commonly found surrounding small trees that serve as aggregation sites for mating pairs.

Our studies indicated that some areas have the potential for grub problems every year, some areas will have grub problems most years and there are other areas that seldom, if ever, see grubs. This is mainly due to the proximity of turf-grass to feeding sites, soil characteristics of the various oviposition sites, and the wetness or dryness of the year. For example, well-drained hilltops may have heavy grub populations in relatively wet years while poorly drained low areas will have the best conditions for egg hatch and grub survival in very dry years. By early August grubs are often sufficiently large that feeding damage may be apparent in high density areas. Ideally, it is the best time to look for beetle grubs in the soil. At this stage the grubs are still small but easily seen and identified. Early detection of heavy grub populations at this time will give adequate time for you to treat them.