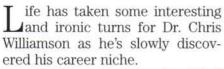
He Took a Chance for What He Wants

by Lori Ward Bocher



- At 18 years of age, he didn't want to go to college; now he has a Ph.D.
- He found it frustrating trying to find a job as a golf course superintendent upon receiving a BS degree because those who were hiring at the time said he was too qualified; but he did find a superintendent's job after receiving his Ph.D.
- Two jobs in industry convinced him that he was better suited

to academics – enough so that he was willing to gamble on a soft-money, non-tenured track job at the UW.

Not that this was his only opportunity to get into academics. "I had several other opportunities for interviews. And, upon being hired here, another institution asked me to apply," Chris points out. But he came to the University of Wisconsin-Madison as the new turf and ornamental entomologist. Hired in December of 1998, he's in the position formerly held by Dr. Chuck Koval.

"I came here for several rea-

sons," Chris points out. "I felt good about the opportunities here and the people here. After all, the UW

the people here. After all, the UW is rated Number 3 in the country in terms of research. And, from a personal standpoint, it's a nice place to raise a family."

He took a gamble...

"But I took a chance by coming here because there are no guarantees," he continues. "My position is non-tenured, supported by soft money (industry supported, not university supported). Three years from now, when the money the university has allocated for this position is gone, I may not have a job."



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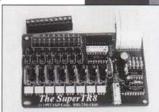
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CENTURY GOLF PROFESSIONALS ❖ WISCONSIN > JOHN MARKESTAD = 608-742-0377 > MIKE PATTON = 630-515-8555 He's hoping that this won't be so. And he's enthusiastically jumping into his new position. "My first impressions have all been very favorable, very positive," Chris says. "Aesthetically, Wisconsin is a beautiful state and very diverse. The university has treated me very, very well. I know that I have the support of my department; even though I'm not a tenured track faculty member, they treat me as if I am.

"Without the support of the industry, my position wouldn't exist," Chris continues. "But I look at it this way: At least my foot is in the door. If you make yourself known and have a good track record, sometimes universities will do what they have to do to keep you. Then again, they may say, 'It was nice having you work for us. See you around.' "Chris is betting on the former.

Agricultural background...

Chris has had several academic and job experiences since graduating from high school in 1983. Born and raised in Defiance, Ohio (near Toledo), he grew up in a rural area and spent lots of summers working on his uncle's 3,000-acre farm of corn, soybeans and alfalfa. "That's what stimulated my interest in agriculture," Chris points out.

However, with no farm in his immediate family, he searched for other agricultural venues. "When I found out about the turfgrass industry, I knew that it was an avenue I could effectively pursue," Chris adds. "But I didn't want to go to college. So I got a two-year associate's degree in turfgrass management from Clark Technical College, which is now known as Clark State Community College."

Upon graduation, he was hired as an assistant superintendent at Kettenring Country Club, a private, 18-hole course at Defiance, Ohio. The superintendent there saw some potential in Chris and encouraged him to go back to school to earn a BS degree. So, after two years on the golf course, he went to The Ohio State University where he received a BS in agronomy/turfgrass science in 1989.

"Well, I got out, and nobody wanted to hire me as a superintendent," Chris recalls. "If they were looking for someone to hire, they'd say I had too much experience. If they weren't looking for someone to hire, they'd say that they'd love to hire me but didn't have a job for me. Maybe I wasn't patient enough, but I decided to go to work for a chemical company, Ciba-Geigy (now Novartis). I worked in sales for agricultural products, not turf products, and covered southeastern Indiana."

It wasn't his niche. Chris was at the job for only two years. "I learned very quickly that I'm not a sales-oriented individual," he admits. "Sales is just not for me. That's the bottom line. It wouldn't matter if I'd be selling shoes to people who really need them. I don't like sales."

Back to school...

So he returned to Ohio State to pursue an MS degree in the area of turfgrass, choosing an entomology specialty because he liked the advisor in that discipline and there was an opening for a graduate student there. Not only did he earn his MS in December of 1993, but he went on to earn a Ph.D. by December of 1996. He was finding his niche.

Ironically, after receiving his Ph.D., he went to work as a golf course superintendent. "While conducting some research at a golf course, I developed a good rapport with the owner of the course" Chris explains. "As soon as I got my Ph.D., he asked me if I would be his superintendent. So I worked for him for six months with the intention of finding an academic position or industry job, which he knew I would do."

In June of 1996, he was hired by TruGreen-ChemLawn as a research scientist in the area of turfgrass and ornamental entomology. And, once again, he discovered that an industry job is not his niche. "My job was to evaluate products that provided quality performance and that were cost-effective," he says. "Companies are in the 'business' to generate revenue. That's the bottom line.

"Universities are not in the business to make money. They provide people with the knowledge, information and tools necessary so that they can do their jobs to the best of their abilities," Chris believes. "I'd rather be the one producing that information, be an information generator."

So in December of 1998 he came to Madison where he once again has found a comfortable niche. Chris' position is 100 percent Extension, although he has an unwritten agreement that he will also be expected to conduct research.

Goal oriented ...

Chris has specific projects planned for his new position. One of his goals is to develop a turfgrass



bulletin that will be sent to turfgrass managers. "I'm working on that with Dr. John Stier," Chris explains. "It will be an interdepartmental, multi-faceted bulletin, with insects, weeds and diseases. It should be ready to go by this fall.

"John Stier and I are also developing a distance learning course entitled, 'holistic turf pest management," " he continues. "If the system is in balance, theoretically you should have fewer pests and you can substantially reduce the amount of inputs. That's why I like the term 'holistic'. Maybe we should call it holistic plant management.

"We're going to offer this course not only to registered students at the UW and Madison Area Technical College, but also to any person who wants to take it for noncredit purposes, such as golf course superintendents, lawn care people, landscapers," he adds.

Another goal for Chris is to build his reputation both in the state and nationally. "I want to present annually at the various turfgrass conferences, shows and short courses," he says. "And I want to publish one article per year in a refereed publication, whether or not I'm tenured. It's also my goal to make this position a tenured-track position. And I would like to see it be somewhere between 60 to 70 percent Extension and 30 to 40 percent research. I believe that an Extension person should have to conduct research in order to bring forth solid, viable recommendations."

Black cutworm research...

While in graduate school, Chris

researched the behavior and ecology of the black cutworm in golf course turf. His work was published in refereed journals and in Golf Course Management and The USGA Green Section Record, "Very little was known about the black cutworm in golf course turf, which is why I elected to study it," Chris explains.

"One of the things I learned was that most eggs are laid up on the tips of leaf blades," he continues. "I hypothesized that you can remove most of the eggs via the mowing process on putting greens, which are typically mowed seven days a week. I tested that hypothesis and, indeed, up to 95 percent of the eggs are removed that way.

"I also looked at insect/plant interactions," Chris adds. "In the

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turfgrass arena, there are endophytic plants that act as symbionts with host plants. They don't harm the plants. In fact, they're beneficial because they produce toxins that can be detrimental to insects.

"It was generalized that endophytic turfgrasses were resistant to black cutworms. But I wanted to challenge that because it had been extrapolated from other related species," he continues. "As I found out in my experiments, indeed, those plants are not resistant. They are very susceptible to black cutworm damage. The endophytes did not have a negative impact.

"I also found out that Kentucky bluegrass, which was once thought of as a very suitable host, is indeed an unsuitable host," Chris points out. "That was a major discovery. Now my question is, 'What is the mechanism of resistance that Kentucky bluegrass has that these other grasses don't have?' I hope to work on that her at UW."

Tough challenges...

As an entomologist, Chris sees the FQPA (Food Quality Protection Act) as the major challenge facing turfgrass managers today. "It's starting to and will impact turfgrass managers as the EPA begins to eliminate several pesticides available for use," he points out. "They're going to have to rely much more upon scouting and monitoring practices because their arsenal of products will be more limited."

He's also worried about the establishment of the Japanese beetle in Wisconsin. "It's been found in Eau Claire and Beloit, and it has really taken over in those areas," he warns.

Likes the out-of-doors...

Chris likes to spend his personal time out-of-doors. "I'm definitely an outdoorsman," he admits. "I like golfing, camping, hiking, kayaking, canoeing, hunting, snowmobiling and any kind of water sport. I used

to be a competitive water skier. I also like weight lifting."

Chris lives in Stoughton with his wife, Amy, and their 2-year-old son, Jacob. "I love it there," he says of his new life among the Norwegians. If things go his way and he finds a tenured career niche, he'll be there more than three years.

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Ten Things to Consider Before Renovating



Editor's Note: I am unable to give credit to the author of these ten tips. The article appeared in at least two newsletters - The Greenerside (GCSA of New Jersey - March/April 1999, pp 14 & 15) and The Keynoter (PA Turfgrass Council - February 1999, p 12), but neither publication noted an author, either. If I learn who that person is, I will let readers know in a future issue. Until then, take this good advice to heart.

If your club is considering a major renovation or expansion, you need to make sure it will address member and club needs not only today, but 10 years from now.

1. Will spending money on your facility be money well spent?

Consider the market and existing clientele. Does improving your facility mean increasing the cost of a round of golf? If so, will the market support the increase? Conversely, you may need to make improvements just to compete with the new golf course down the street.

2. To plan or not to plan?

A master renovation plan is a strategic tool used to guide future golf course improvements. Develop one comprehensive plan that covers the entire golf course rather than several small, loosely connected plans. A comprehensive plan gives the "big picture" and ensures an integrated approach to improving the facility.

3. Focus on the fundamental first.

One of the first things to think about is where to make improvements. Review all golf course features - tees, putting surfaces, hazards, practice areas, etc. - and focus initially on improvements that will address fundamental issues of playability, strategy, shot value, maintainability, drainage, aesthetics and safety. Addressing shortcomings in these areas is a first step in the right direction.

4. Don't let the budget get in the way of a sound comprehensive plan.

A budget should be used as a tool to schedule a necessary improvement. Prioritize improvements and then implement them as a budget allows. Before long, the plan of improvements will be implemented.

5. What are some of the factors that impact the cost of remodeling a golf course?

Scope of improvements, availability of qualified contractors, using in-house vs. contractors, materials cost and time of year.

6. How to handle disruption of play?

Typically, phasing improvements minimizes impact to the entire golf course and allows a portion of the course to remain open for play. Other ways to minimize disruption include using temporary tees and greens and changing the routing of the course. Scheduling work during off-peak play times is also an option.

7. Determine if in-house resources can complete some of the work or if all work will be completed by outside contractors.

In most cases, in-house resources can perform some golf course improvements. Tasks such as stripping sod, tree removal, minor drainage and minor irrigation system modifications can usually be completed by a maintenance crew.

8. Who should be included in a master planning project?

The key to a successful master plan depends on input from the individuals who are responsible for the fiscal or daily operations of the facility. These are the major contributors in the planning team: golf course superintendent, golf pro, green committee chairperson, long range planning committee chairperson, representative men, women, junior and senior golfers, golf course architect.

9. How long does it take to complete a master plan renovation document?

This depends on the scope of the project, but preparation of a master plan document should take about 60 to 120 days.

10. Work with an architect who has golf course renovation experience.

Many architects consider golf course renovation work more challenging than new course work design because of "built-in" constraints associated with existing courses. Often renovation work requires working around existing irrigation systems, drainage, trees and parts of the golf course that are to be preserved. Renovation work requires a certain level of experience and it pays to work with an architect who has course renovation experience.

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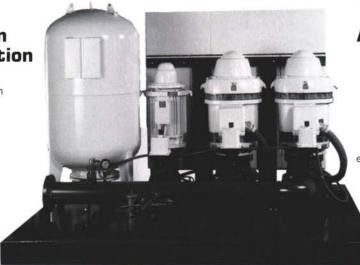
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Down Memory Lane on an Old Toro Tractor



By Monroe S. Miller, Golf Course Superintendent, Blackhawk Country Club

E ach year, at one of our early green committee meetings. I like to take a nicture of the lings, I like to take a picture of the committee. They have always humored me. Mostly, the photos are for me, but sometimes one will find its way into The Divot, our club newsletter.

Usually I like to compose the photo with something unmistakably related to the golf course - a scene inside the shop with the new floor hoist or a shot on the course itself - as the background. This year Dave rolled our old Toro tractor outside the shop and the group gathered around for the annual committee portrait.

I have a soft spot in my heart for those old Toro tractors. It was the first piece of equipment I operated on my first day of work at a golf course, when I was still a teenager, working for Pete Miller at the Nakoma Golf Club in Madison. I thought it was cool beyond words, and remember calling home to my folks on our farm to report on this unique piece of machinery.

Farm kids are surrounded by equipment, and as I reflect back I suspect that had something to do with the appeal that particular tractor had to me.

Pete was the most creative course superintendent I have known. He went on to great things at the Firestone CC, evidence others respected his abilities like I did (and still do). Pete had modified Nakmoa's Toro tractor with huge (and I do mean HUGE) flotation tires. I seem to recall they were airplane tires. Anyway, because the lower end of Nakoma is nearly a swamp with wet peat/muck soil, getting stuck was a daily occurrence with some equipment. But not so with that old Toro; it scooted right along the surface on those big balloon tires.

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We relied on the Toro tractor for lots of things - hauling sand to bunkers, transportation around the course when cutting cups, towing a stone boat with small equipment on board, moving the sectioned wood from a diseased American elm cut down near the 12th hole back to the shop yard. There was, in those days in the mid-1960s, no job too large or too small for the Toro tractor.

And there was frequently competition to see who got to use it for work. The walking greensmower route farthest from the shop was favored because there was a chance you would get the Toro. It pulled a Jake 321 on a stone boat and the clippings were dumped in the box of the tractor. I wasn't the only one who enjoyed driving it.

Augie Miller enjoyed driving it, maybe more than I did. There were three Millers on the golf course staff for a couple of years - Pete, Augie and me - and we weren't related. That was especially good with regard to Augie. He was in high school and a tad on the wild side. One Saturday, Augie figured the best way to be a hit at an afternoon party in Vilas Park - it was on the other side of the Arboretum - was to unlock the shop, borrow the old Toro tractor, and drive it to the party. I wasn't there, but the story was he had the dump box filled with ice and buried a half barrel on tap in the





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Our Toro tractor fresh out of the paint booth in 1974.

middle of the dump box. No wonder he was popular! The old Toro made it back to the shop, Pete was livid, but Augie survived and worked there as long as I did. Amazingly, he went on to become a lawyer; he must have grown up!

That Toro tractor was involved in races on Arboretum Drive - I witnessed that one - and pulling contests in the shop yard against an IH 240 tractor. I didn't see any, but heard about them and the ruts in the gravel made by the tires of the two old tractors more or less confirmed it. If that old machine could have talked, who knows what stories it could have told!

In the sparse equipment inventory I inherited when I was hired as course superintendent at Blackhawk CC in January of 1973 were two old Toro tractors. Actually, there was one old Toro tractor and one really old Toro tractor. The older of the two didn't run and was in very poor condition. We traded it on some new pieces and I am almost sure it found its way to a bone yard. The other was in quite excellent shape and we used it for many years, most recently for the green committee picture.

One of the first things we did for it was clean it, prep the surfaces and give it a good paint primer and a finish coat. That first winter we painted the Toro tractor, a Jacobsen G-10 tractor and an IH 240 loader tractor. I figured they should at least look good, and they did. Back in that time, lots of golf course shops were painting equipment; now hardly anyone does, including me. It has gotten too complicated, and the manufacturers are putting better paint on equipment these days. But the red paint we laid down on the Toro tractor looked pretty good; even now, 25 years later, it is very acceptable.

We used our Toro like Pete did; there were few things it wasn't up to. And there were days it had a set of rough mowers behind it, after it had been used to set the pins for the day. It was darn hard to steer, and by day's end the operator's arms were ready to fall off.

We hauled gravel and hot mix for cart paths, soil for