e Little Company Willing to Dive in

invaders is alarming. Zebra Mussels were first transported to the U.S. Great Lakes in the 1980s by transoceanic vessels, but as of 2010, they have already established themselves in the rivers, lakes and wetlands of 31 states, according to the Minneapolis Park and Recreation Board. The Board declared several of its home state's lakes infested in 2010, including Lake Minnetonka and Lake Nokomis. Since 1991, the Mississippi River has been carrying the mollusks, which is the water source that supplied North Oaks with its unwanted visitors. Suerth, having an extensive background in Scuba diving, first started the company to help family and friends restore their lakefront properties by pulling lake weeds out of the water. Waterfront Restoration started out as a unique idea, but over the last nine years, has truly set itself apart, as it is one of a handful of businesses in the country catering to a high demand related to the Zebra Mussel.

"The need for truly effective control methods is enormous and growing rapidly as invasive species continue to spread," said Suerth. "We are



HERFORT D NORBY Golf Course Architects

Phone: 952.361.0644 Fax: 952.361.0645 e-mail: golfnorby@earthlink.net web: www.herfortnorby.com the first company in Minnesota to offer manual extraction of Zebra Mussels."

With the number of infested areas on the rise and the unfortunate truth that these mollusks aren't going anywhere, the Minneapolis Park and Recreation Board suggests golf course superintendents and employees be aware of the issue and monitor it regularly. However, once the Zebra Mussels are discovered, fast action from superintendents is needed, or else courses may have to resort to drastic and expensive measures.

"More serious problems can prompt courses to build a second irrigation intake", said Ty McClellan, an agronomist with the U.S. Golf Association's Green Section in a turfnet. com article. "Courses simply use one line until it becomes too clogged, then switch to the second line while the first is cleaned."

Controlling the pests and preventing the serious clogs is the real challenge, since they accumulate and conglomerate so quickly. As suction lines and intake pumps suck in water for use on the course, they also suck in the mussels, which quickly form a massive encrustation over intake screens. That's where an innovative problem-solving company like Waterfront Restoration comes in, sending in trained divers equipped with customized metal brushes and small detailing tools to scrape the hard shells away. The divers are always challenged, as each situation is a little



BEFORE PHOTOS: The photo below is of a portion of an intakes. Estimated >80% covered with zebra mussel buildup.



different.

"The experience of the dive is completely unique each time," said Suerth. "What's consistent is that every dive is full of surprises. In many cases where mussels have developed multiple layers on top of themselves, it's almost like chipping away cement from the structure to get through the calcified layers."

After discovering the stripe-shelled creatures, North Oaks is doing what is necessary to keep its course in pristine condition and that means continuing to utilize Waterfront Restoration's services on a regular basis.

"Because the Zebra population is exploding, we anticipate having Tom's crew out twice each year beginning in 2012," said North Oaks superintendent Brian Boll.

North Oaks is one of the first area golf courses to be hit, but with the surrounding lakes and waterways becoming infested, it's only a matter of time before other courses uncover their own nightmares lurking beneath course lakes and ponds. Hiawatha Golf Course and Meadowbrook Golf Course both have direct connections to Zebra Mussel infested water, according to the Minneapolis Park and Recreation Board.

Most of the time, the infestation has already begun before superintendents find it. After discovering their irrigation system was at risk, members at Winfield



Intake1 heavily covered in zebra mussel buildup, causing significant obstruction of water flow

Country Club in Winfield, Kansas chipped in almost \$8,000 for an acidinjection system, designed to kill the mussels, while improving grass growth, according to a 2007 *Kansas City Star* article. Once it was turned on, it worked, killing thousands of mussels, but the damage was already done to irrigation heads.

"It had clogged up irrigation heads, such that it took me two weeks to get the shells out of them," said course superintendent Steve Hollembeak in the *Star* article.

Although filters, screens, acid injection stations and flushing have

helped golf courses prepare for and deal with infestations, a service like the one that Waterfront provides, might make all the difference in terms of course upkeep and provide golf course superintendents with the hope that the problem, although unsolved for now, will at least be contained.

"We do expect to serve a growing number of golf courses in the next several years as the infestation of Zebra Mussels spreads. We are prepared to handle the growing problem and have a team of divers trained specifically for this type of irrigation intake work," said Derek Lee, former diver and current Account Representative with Waterfront Restoration.

Like the Minneapolis Park and Recreation Board, Waterfront suggests golf courses train employees to monitor and identify zebra mussels and infestations. Taking proactive steps in preparing an action plan complete with budgets and equipment needs, is something Waterfront recommends courses do.

"Fortunately, controlling Zebra Mussels on a localized level is highly cost effective. Getting started with a regular inspection program, even before the infestation begins, is highly recommended," said Lee.



MGCSA Championship: August 27th New Richmond Golf Club Are You Ready?



Within the Leather

by David Kazmierczak CGCS

I had the good fortune of attending the MGCSA Scramble at Golden Valley

Golf and Country Club on June 11th. It was a sun-splashed day, rather windy with a touch of chill in the air which was welcomed by most of the competitors since it was hot, sticky and very windy the day before.

My team, comprising my two assistants and my brand spanking new rough mower, managed our usual middle of the pack finish. The lunch and appetizers afterward were very good. The golf course was in fantastic condition, and I would like to send a big shout out to Superintendent Jeff Ische and his crew for providing the quality track for all of those who played that day.

Everywhere I looked both before, during, and after the round I saw smiling, happy faces that were having a great time at a great venue. But the most significant thing of note was the number of those broad grins. For the first time, in what seems to me a couple of years, this MGCSA event was sold out.

> When I started as superintendent at Prestwick on 2001, one of my priorities was to attend as many MGCSA events as I could, and to reward my

assistants and possibly other key members of my team with an enjoyable day of golf and camaraderie whenever possible. If there was an educational element involved, that was even better. I considered it part of our compensation package, and basically budgeted for it every year. I still do. We do not make it to every event, but rare is the year we cannot make it to at least half of them. I doubt there are many others who can say that.

I do not make that statement as a boast, or in any way look down upon any member who does not regularly attend monthly meetings. Every member has his or her own idea of what the MGCSA means to them. Every member has their own agenda, budget considerations, personal reasons for attending or not. It was simply very refreshing to see a packed house, and if one dives deeper into the meaning of the full event- very important.

"The Scramble" as it is now called, is actually a combination of what used to be the Scholarship Scramble and the Research Scramble. There used to be two events, but because of lack of support, the MGCSA condensed the two into one. The MGCSA is not alone in dwindling participation in local events. It seems many of our countries' local Superintendent organizations have seen massive declines in monthly meeting attendance, with the majority of attendees being vendors. That is not every association, as a review of web sites or association magazines finds more

