NORTH SCOTT COMMUNITY SCHOOL DISTRICT, ELDRIDGE, IA, won the STMA 2010 Football Field of the Year in the School/Parks category, led by John Netwal, CGCS, a leader and influential turf manager in the region. Director of Operations Netwal was a superintendent for 20 years before taking the sports turf management for the school district before being named to his current post. He and what he calls the District’s “unsung heroes,” his 3-man maintenance team, Andy Hamman, Terry Loesel and Chris Thomas, cover 110 acres of general grounds and 11 acres of sports fields.

The football field needed renovated because an open ditch between track and field was getting worse and so was the drainage. The 50-year-old playing surface was stripped to a depth of 11 inches to establish a new base pad for rebuilding the field; the pad was laser-leveled and new irrigation and drainage systems were installed. The entire playing surface was capped with 4 inches of 85-15 mixture of USGA sand and Dakota peat, and laser-graded. Then the surface was lowered about 6 inches to provide for a smoother transition from track to turf.

**Grow-in began spring 2009**

“The original project schedule gave us 145-day window to grow in. With weather delays we lost 10 days, which I didn’t think we could afford,” Netwal wrote in his entry. “We finally seeded the field April 24 and began the grow-in by irrigating the field with 3-minute sets on the hour throughout the day. Within 12 days of this light, frequent irrigation the field began to germinate; then we started to pump nutrients into the field.

“In May we applied fertilizer weekly (total lbs: 5.07 N, 3.49 P, 4.32 K/1,000 sq ft) in just the first month. May 26, 32 days

---

5/18/09: 24 days after seeding
5/26/09: Turf density after first mowing
6/8/09: 46 days after seeding

---

*9/4/09: Pre-game warm-ups, 135 days after seeding*
after seeding we mowed the first time and by the end of the month we were mowing 3x/week.

“We continued weekly fertilizer applications through June (nutrients total lbs: 7.2 N, 4.49 P, 5.69 K/1,000 sq ft) and the program jump started our field and brought density to nearly 100% be the end of June.

“In July we changed the irrigation regime to 15-minute sets during the night with occasional syringes during days as necessary. We also began to use growth regulators that reduced mowing requirements from 3x to 2x/week. July 31, 100 days after seeding, we took rootzone soil profiles and found a 3.5-4-inch root system throughout the field. Through July’s total nutrients: 9.37 N, 4.94 P, 6.66 K/1,000 sq ft.

“In August we changed irrigation to deep, infrequent cycles to encourage deeper rooting. Through four months of growth, our total nutrients were 10.66 N, 5.55 P, 7.49 K/1,000 sq ft.

“We held the first game of the season September 4, 135 days after seeding. The turfgrass was dense and had established a 4-inch root system throughout the field so it was ready. Through 5 months’ growth: 12.74 N, 5.75 P, 8.29 K/1,000 sq ft.

“In October we cut back on fertilizer apps as we began to phase out of the grow-in and into a maintenance fertility program. Into November and football over, we made a final, dormant application bringing the total grow-in nutrients to 13.42 lbs N, 5.75 lbs P and 8.51 lbs K per 1,000 sq ft.

“This aggressive grow-in program succeeded as we went from seed to full season of play without missing one scheduled event,” Netwal wrote.

SportsTurf: What changes are you planning to make to your maintenance plan for 2011, if any?

Netwal: We have always challenged ourselves as a team to take our turf management programs to the next level and try to exceed the expectations of our administration, coaches, athletes and community. To accomplish this we constantly evaluate our maintenance
programs for effectiveness and examine the labor intensity required to produce those results. It is our goal is to be as cost effective as possible without sacrificing quality. We also take the time to run our own trials with new products or maintenance techniques to keep us on the cutting edge. This way we know exactly what to expected before our investing in a field wide application or with a new maintenance procedure. We are always looking for the best blend of maintenance practices and procedures that will provide us with the highest quality of the turf.

This past year we conducted multiple test of Tenacity herbicide (Syngenta) for the purpose of exploring if it is something that would fit into our programs.

Through our own research, we learned that this may be an effective tool for reducing poa annua in our bluegrass fields and have developed a comfort level with this product through our own trials. This year we will be applying Tenacity @ 3.2 oz/acre every other day for a total of five applications starting in early June on our bluegrass soccer and football fields. We hope to repeat the same success we had in our trials last year and if so, we expect to see a significant reduction in the poa annua in our fields.

Another change this year is that we will be treating our high wear areas on our football field differently than the rest of the field. We will be overseeding our sidelines and the area between the hash marks between the 20-yard lines with Rush Kentucky Bluegrass. It is our hope that this more aggressive bluegrass will perform better in these high traffic wear areas. Another change to our program will be to supplement these same areas with additional nutrients to bolster the growth and density of the turf these vulnerable areas. By treating these areas separately from the rest of the field, we hope to grow more durable turf on the sidelines and between the hash marks.

**By treating these areas separately from the rest of the field, we hope to grow more durable turf on the sidelines and between the hash marks.**

---

**Netwal:** “Green Side Up” over the years it has come to mean many different things for me as a turf manager; but mostly this term, reminds me not to take things so seriously. It all started out, many years ago on a sodding project, when one of my staff intentionally laid one piece of sod upside down. It was on that day, that I believed that I learned not to take myself, so seriously and that term has followed me throughout my career to mean just about anything I need it too, regarding turf management.

Another bit of advice that has always stuck with me throughout my life and career is something that my father had often reminded me of, and that was; “anything worth doing is worth doing right.” This advice as has guided me throughout much of life and career. I may not have always gotten things right, but I figure if you start out trying, hopefully most of what I do will.

**ST:** How do you balance your work and personal time?

**Netwal:** Not very well, this has always been a challenge for me. Unfortunately, some very special people have made some sacrifices, so that I could pursue my career goals and now that that time has passed, I may never be able to get that time back. My advice to others in this profession would be to make sure that you take the time for yourself and your family. Fortunately, I have taken up a new hobby and I have actually taken some time off work to pursue it.

**ST:** What advice might you have for K-12 turf managers who are trying to maintain high standards despite budget cuts?

**Netwal:** One thing that has worked very well for me over the years is what I refer to as my “Sports Field Maintenance Plan.” This plan is a very detailed written plan that outlines every maintenance task, product application and costing information for everything we do in the maintenance of our athletic fields. We calculate how much each individual maintenance input for our fields is actually...
going to cost. For example we know that in any given year we are going to mow one of our fields one time per week in the off season and twice a week during the season. This means that we may need to mow the field approximately 45 times. We also know that it takes us approximately 2 hours two mow the field once; thus requiring approximately 90 hours of labor to mow the field for the season. Knowing approximately how many hours it going to take to mow our field for the season multiplied by our labor rate gives us our total mowing cost for the season.

We use this approach for every input we schedule for all of our fields. It's in this detail that gives our plan and budget its legitimacy. When you know your programs in this detail, you can easily evaluate and respond to any adjustments to your budget. I have always prided myself on the detail of my management plans and if I was ever asked to reduce my budget, it would be relatively easy task for us to make adjustments. So if my employer asked me to reduce the budget; I would ask them just what maintenance task they would want me not to do? I would begin by with asking them if they would want me to extend the periods between painting game lines and if so, would they accept the lines being faded? Obviously, the answer would probably be no, that's unacceptable.

Then I would ask them if they wanted me to mow the field one time less per week during the season, but if we do that would they be willing to accept mow muffins on the playing surface occasionally? Again, the answer would most likely be no. Then I would ask them if they wanted me to fertilize less and if we did so, would they willing to accept thin turf on their playing surfaces? I'm sure the answer to that would also be no.

If you become the expert of your fields and know what your costs are for everything you do, you can tell people what they can expect to see in advance if you delete or reduce any maintenance activity. You might be surprised to find that they won't want to reduce
your budget because they definitely won’t want the results. You need to be able to effectively communicate and demonstrate your maintenance programs and by having a detailed written Sports Turf Management Plan would go a long way in accomplishing you as the expert on the field to your employer.

ST: Are you yet involved in “sustainable” management practices? If so, what are you doing?

Netwol: As a manager of a property, I have always taken the responsibility of managing the land seriously. It has always been a goal of mine to leave that land in better shape than when I took over the responsibility for it. I have always strived to be the best manager that I could be with the property that was entrusted to me. I have always wanted others to enjoy the property as much as I did. Some of my past efforts to demonstrate this sense of responsibility have lead to the awarding of two Environmental Stewardship Merit Awards from the Golf Course Superintendents Association of America and the certification of Glynns Creek Golf Course in Long Grove, Iowa as a Cooperative Wildlife Sanctuary through the New York Audubon. Much of what I have learned through those experiences continues to manifest itself in everything we do here for the North Scott Community School District. It has been a great honor to provide our students and community with the highest quality of playing conditions in the area. ■