Player safety was the top priority in renovating the regulation soccer field for a NCAA women's team.

By Bob Tracinski

The game of soccer and collegiate women's sports have at least one thing in common, they are both fighting for recognition and parity with other sports. The University of Wisconsin at River Falls found a way to advance both causes, and in the process, captured the Sports Turf Managers Association Soccer Field of the Year Award for 1993. Two important reasons the campus won the prize are a skilled groundskeeper and the encouragement of a professional football franchise.

The River Falls campus is part of the University of Wisconsin education system. It offers undergraduate majors in 54 areas and minors in 59. Enrollment is approximately 5,100. Sports at UW-River Falls involves 18 teams. There are 40 acres of athletic fields, but only 23 acres have irrigation systems. Fields include: one full-sized football game field and three full-sized football practice fields; one standard softball field; one standard baseball field; and one standard women's soccer field—the 1993 STMA Soccer Field of the Year. The 23-acre intramural complex includes eight softball diamonds, two full-sized soccer fields (also used for intramural football); and three combination fields that are smaller than soccer-regulation size. Many of the fields are rented out for high school use during the summer.

In early 1991, the administration at UW-RF recognized that if women's soccer was to be a success, significant field renovation would have to occur. The school's teams have been part of the NCAA Division III program since 1991. Also since 1991, the Kansas City Chiefs football franchise has operated its training camp at the university. In many ways, the cooperative relationship with the NFL led to the development of an outstanding field.

At the heart of all this activity was Tom Foley, groundskeeper—athletic and turf. Foley welcomes each new challenge as a "stimulating experience" and has an enthusiasm for sports turf management that draws in learning opportunities the same way a magnet attracts metal.

The Chiefs' summer camp program includes two to three intense practices a day. It's a weeding-out regime for potential players. It can also be a weeding-out for less-than-vigorous turf.

"Working with the Chiefs' lead groundskeeper, Andre Bruce and his staff, and with consultant Jim Watson, on developing and implementing the Chiefs' plan was a super experience," says Foley. "Player safety was, and is, the top priority. All fields within the program receive the same degree of care. There is to be no difference between the practice fields and the game field. Even the field-painting is handled the same. There are so many details to take into account at the professional level. For example, if there is even a hint of possible rain, at least one of the fields is always covered prior to a game. It's important that each player be given a fair chance for peak performance."
Working out the details of the program proposal to cement an agreement with the Chiefs was, itself, a major project. Because Foley had worked with the Chicago Bears’ summer training camp program at the University of Wisconsin, Platteville from 1984-86, he was well-aware of the benefits the school could reap, and actively “lobbied” for the Chiefs’ program. “The administration really got behind this project. Establishing a specific individual to act as liaison with the Chiefs paved the way for program success,” Foley says. “Keeping that position open once the program got underway helped speed communications and eliminate the potential for problems. A small campus usually isn’t geared to handle something that extensive,” he adds.

“The procedure and level of care at the professional level are much more than we can manage for all the fields within a standard Class III maintenance program, but so much of the basic technology can be translated to work with a lower budget. Studying the basics behind each procedure and asking questions about choices made, really pays off,” Foley explains.

Foley is no stranger to study. He earned a degree in agriculture from the University of Minnesota, with the original intent of teaching high school agriculture classes. But the lure of the Minneapolis/St. Paul area drew him to a position with the University’s Urban Extension and Parks Department. In 1984, he moved on to the University of Wisconsin at Platteville. His interest in sports turf grew to unabashed enthusiasm while working with the Chicago Bears’ training camp turf specialists there. His next step up was in January 1986, when he became groundskeeper at UW-River Falls. Foley served as a lead worker reporting to academic staff managers in charge of facilities. He supervised a staff of one year-round special laborer and two seasonal lawn-care workers.

Foley worked under Building and Grounds Supervisor Manville Kenney. Also supervised by Kenney—on the same management level as Foley—are the groundskeeper (landscape and ornamentals,) and the liaison to the Kansas City Chiefs’ groundskeeper. Foley and Kenney feel strongly that the involvement of the UW-RF grounds crews with the Kansas City Chiefs training-camp operations has sharpened the grounds’ activity as a service unit.

The women’s soccer field renovation was not part of the Chiefs’ program, but rather, another step in the continual upgrade of the University facilities reflecting the overlying attitude and commitment to excellence on campus.

Kenney says, “Renovating this field and establishing it as a safe field for a contact sport is itself important. Dedicating the field from its inception as a women’s soccer field represents a creative response to the cry for sex equality in college sports programs. In an era of tightly guarded resources, one small public campus can lead constructively by providing a field for women’s sports that at athlete of any gender will be proud to play on.

“We found that having the Chiefs here gave us an even greater awareness of the safety level on the playing field. Obviously, quality turf provides a safer playing field. Although our university, as all educational facilities, is facing a

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fiscal crunch and is under pressure to
costs down, we will continue to maintain
and improve athletic facilities,” Kenney
continues.
“It is vital to avoid as many ‘crises in
management’ as possible by having a
consistent, ongoing program. As with all
viable entities in today’s world, we learn
to make trade-offs where we can and
strive to be more inventive in our use of
labor and funding,” he adds.
As of April 1992, rough and uneven
conditions marred the field that was
designated for use by women’s soccer
for the fall 1993 semester. Construction
of a new field, with drain tile and irrigation,
was not financially feasible.
Foley says, “Because this field, which
had been in use for several years, had
underlying soil with decent drainage
characteristics, the decision was made
to renovate the field by removal of the
existing clay topsoil and replacing it
with a new soil mixture. Before field
construction began, arrangements were
made to connect a hydrant to the
existing city water line, to provide quick
and easy hookup for the water cannon
and sprinkler irrigation that would
be needed.
“In the summer of 1992, the old
material was removed by grader and
blade. Grading depths varied from 10
to 16 inches across the field, depending
on the depth of clay topsoil. The base was
then leveled in preparation for
addition of the new medium.
“The new soil mix contained 265 tons
of screened sand. The particle size was
kept standard at 0.5 to 1.0 mm. Next was
250 tons of sand loam, the natural soil
of most of the region, which was
available at another campus site. To
finish the root zone, the material near the
surface with mixed with a Minnesota-
source peat, providing organic matter and
structure for plant establishment. The
various components were blended to a
standard consistency with a mix-member
type machine. The root zone mix of
75 percent sand, 25 percent sandy loam
and five percent peat extends six
inches deep. Drainage throughout the new
soil profile is excellent.
“Major renovation was completed
field was then seeded with the Northrup
King Athletic Pro II blend of bluegrasses
and perennial ryegrasses at a rate of three
pounds per thousand square feet.

Tom Foley at women's soccer field.

Anderson’s 12-24-12 starter fertilizer
was applied at the standard, labelled rate.
Adequate rainfall led to fairly even
germination.”

Coping With Setbacks
The excellent start met with tough
times. Foley says, “Although cold winters
and heavy snowfall are normal for
Wisconsin, January 1993 brought a
warm spell and driving rains. Cold
temperatures quickly settled back in,
leaving the turf coated with a heavy
layer of ice that lasted until late March.
Once coated, grass plants couldn’t
breathe. Early April warm-up was fol-
lowed by a frost and another late freeze.

By late April 1993, it appeared that
the resulting ice layers had killed large
areas of the new seedling. (In addition
to contending with ice crystals, established
turf on some of the other fields
also experienced snow mold problems.)
Continued cool weather delayed a
second seeding and fertilization until May
15. At that point, Athletic Pro II was
again slit-seeded in two directions at
the rate of three pounds per 1,000 square
feet. Additional starter fertilizer was
broadcast.

“Because the soccer season was fast
approaching, it was necessary to do
everything possible to get establish-
ment. The entire field was pin-spiked to
enhance seed-to-soil contact. Germination
was excellent.

“Equipment used by the contractor to
apply the seed and handle follow-up
irrigation had created ‘channels’ or
‘ridges’ in the field. These had to be
eliminated,” says Foley. “We arranged
to borrow a small pull-behind roller
from the Chiefs’ ‘arsenal’ to tackle the job.”

On June 7, 1993, a maintenance
schedule began based on soil analyses
prepared by the University of Minnesota.
A secondary goal of the program was to
combine nutritional products obtained
from local agricultural sources with
those from turf supply companies. As a
result, potassium sulfate (0-0-66) and
granular urea (46-0-0) were used through
the summer. It takes more expertise to
apply and monitor these materials
correctly. When they are used properly
they can provide good results. For the last
fertilization in October, Par Ex 24-4-
12 was applied at a rate of two pounds
per 1,000 square feet.

“Although water is metered sepa-
rately, record rainfall made irrigation
unnecessary. Broadleaf-weed control
was applied as necessary to eliminate
those weeds that crept in during the
early spring setback.

“Maintenance labor costs for the
women’s soccer field were budgeted at one
person for eight hours a week for 24
weeks,” Foley explains.

Special Maintenance Challenges
“Soccer fields have no need for a
crown greater than 0.5 percent,” says
Foley. To attain this level surface, the
Kansas City Chiefs’ groundskeeper
allowed us to borrow his roller for use over
a three-day period. To paint soccer field
lines with less frequency, the growth regu-
lator Primo was mixed with field paint.

In July 1994 the Women’s Soccer
Field at UW-RF was “looking gorgeous,”
according to Kenney. “We’re maintaining
the turf at 2 to 2.5 inches during the sum-
mer months. The grass is developing a
deeper root system, needs less irrigation, and is shading out invading weeds. We’ll gradually reduce turf height to 1.25 to 1.5 inches for the playing season. Although it’s still necessary to irrigate with the more labor-intensive water cannon and sprinkler setup, good water management and timely rainfall continued to interact with the established maintenance program to sustain the thick stand of grass.

**Scheduling Activities**

During the first year of use, all soccer physical education classes used the field. The first class “hit the field” at 11 a.m. On weekdays, the women’s soccer team practiced from 4 p.m. to 6 p.m. This gave the grounds crew adequate morning hours for irrigation and field preparation. Although weekday activity was steady during those hours, the field help up well.

Women’s soccer attains varsity status at the start of the 1994 season. At the university level, sports move from intramural status through intermediary club status to prove themselves able to achieve enough sustained interest and player participation to achieve varsity status. The fall varsity soccer program begins in late August and extends to early or mid-November, depending on how far the team advances in tournament competition.

In January 1994, Tom Foley moved up to the position of grounds crew chief at the University of Wisconsin, Whitewater, located south of Madison and west of Milwaukee. Football is the premium sport at Whitewater. The stadium hosts the university’s football games, regional high school football games, summer high school football camps, a drum and bugle corps regional competition, and soccer playoffs. “We need to work stadium maintenance procedures around a heavy schedule,” says Foley. “But it’s such a great facility. It needs to be used.”

Typically, Foley is enthusiastic about the new position and calls the whole experience “stimulating.” Although he knows it will take time to assimilate background on conditions as they are now, develop a master action plan, and begin the implementation of that plan, his enthusiasm is contagious.

There’s that Foley magnetism again. He draws in new information, integrates it into usable patterns with his own store of knowledge, and then attracts the interests and cooperation of those around him.

Foley spreads his enthusiasm to both the national and chapter levels of the Sports Turf Managers Association. “There’s a wealth of excellent information available through the STMA and so many members who are willing to share their knowledge and experience. There’s so much to be gained by attending seminars and workshops and getting involved.”

“I really appreciate the people who gave—and continue to give—their time and effort in making sports turf a viable career path,” Foley says.

Foley takes an active role in that as well. He was thrilled to provide encouragement and serve as a reference for a student who is planning to make sports turf management his career choice. “I feel that STMA has so much to offer,” Foley says. “The whole field is a ‘sleeping giant’ just awakening.”

Bob Tracinski is the manager of public relations for the John Deere Company in Raleigh, NC. He is also public relations chair for the STMA.

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