Gridiron maintenance challenges within the SEC

MEETING THE EVER-CHANGING MAINTENANCE NEEDS of college athletic fields must begin with a winning team of turfgrass managers. The grounds crew at Auburn University is well rounded with turfgrass management and horticulture graduates as well as former athletes who know how an athletic field should perform. The crew of seven full-time employees and six students is responsible for maintaining 15 acres of athletic fields, a 23-acre golf practice facility, and the landscaping around the athletic facilities. Directed by a graduate (BS and MS) of the Auburn Turfgrass program, Eric Kleypas, the crew fully understands the importance of football in the South, and especially in the Southeastern Conference (SEC).

With some of the best athletes in the country, delivering a safe and playable field is a must. Also it is important to keep the fields looking in excellent shape, as they are exposed to tens of thousands of live viewers and millions of eyes through TV coverage on Saturdays in the fall. And it doesn't end there: with a fierce recruiting race for the best players, it is important to keep the fields in excellent shape year-round. Add special events to the mix, and maintaining fields in the SEC can become extremely challenging.

Facilities used by the Auburn football team include natural grass at Jordan Hare Stadium, with a capacity of 87,451 fans, two natural grass practice fields, and one indoor artificial turf field. Tifway bermudagrass is the turf of choice and all fields are overseeded in the fall with perennial ryegrass to maintain playability and aesthetics throughout the winter. Depending on the time of year, mowing heights range from 5/8” to 7/8” For the majority of the summer, height of cut is at 3/4” and fields are mowed six days per week. Fertility requirements are met with a combination of slow release, polymer coated products and supplemented with quick release, soluble sources as needed. Summers are spent frequently core aerifying to alleviate compaction, remove logo paint, and slow organic matter accumulation.

THE NEED FOR QUALITY TURF YEAR-ROUND

As with other schools in the SEC, recruiting has become a year-round process at Auburn, creating the need for pristine athletic fields 365 days a year. The turf
The Auburn grounds crew has been asked to transition from perennial ryegrass to bermudagrass in the spring/early summer while keeping the fields game ready for recruiting visits and summer camps.

Southern sports turf managers know and have been told by many experts that in order to maximize the health of bermudagrass, timely removal of the ryegrass in early spring is essential. Dense ryegrass stands can suppress bermudagrass growth and reduce development throughout the summer. Thus applying an herbicide is the most assured way to control the perennial ryegrass and encourage bermudagrass development. The problem with chemical removal is that we normally observe a 3 to 6 week period of low quality turf between perennial ryegrass death and bermudagrass development. Low quality turf is seen as a negative for recruiting.

The Auburn grounds crew has reached out to major league baseball groundskeepers to learn how they manage transitioning in the middle of a baseball season without using chemicals. After many conversations, the decision has been made to use lower mowing heights, grooming, aerification, and soluble nitrogen to favor bermudagrass growth without a massive die-out of ryegrass. Mowing height is gradually reduced from 7/8” to 5/8”. Vertical mowing occurs every other week as a groomer to remove ryegrass leaves and allow sunlight to reach the bermudagrass. Core aerification further thins the ryegrass canopy and increases sunlight into the soil surface. Light, frequent applications of soluble N supplement a slow release polymer coated urea application to favor bermudagrass growth.

The needs of recruiting make the effort to minimize the time frame of visible grow-in necessary. If unsuccessful, the final option would be to re-sod the football fields each spring for an instant transition.

MANAGING SHADE ISSUES

Recently, the Auburn grounds crew inherited a new challenge in turf management. Completion of an indoor football facility created instant shade issues on the outdoor fields. Building the indoor field on the south end of the football complex allows the athletes to walk straight from the weight room to the field without going outdoors. While convenient for the football team, the indoor facility is
not so convenient for maintaining the natural grass fields located to the north and west of the building. To make things even more interesting, the practice field to the west of the indoor facility also has a tree line on the opposite side of the field creating morning shade by the building and afternoon shade by the trees.

Irrigation zones are designed so that areas of adequate sunlight can be watered differently than shaded areas. Due to the angle of the sun, shade lines extend the farthest onto the fields in the winter and result in a poor stand of bermudagrass each spring. To determine the best strategies and/or bermudagrass variety for maintaining turf in the shade, the grounds crew has turned to the Auburn University Turfgrass Program for help. Auburn graduate student, Philipe Aldahir, is working on his second year of a research project testing bermudagrass varieties under different levels of shade, traffic, and overseeding to determine the best fit for the football practice fields at Auburn.

MORE HAPPENING ON THE FIELDS

For collegiate level turfgrass managers, the saying goes that “everything you see at the professional level will eventually trickle downhill.” While game days are still the first priority, college football stadiums have evolved into multi-use facilities. At Auburn, the turf crew has witnessed several additional events at Jordan Hare Stadium. The field has been the venue for concerts, graduation ceremonies, autograph sessions, a finish line for 10K and half-marathon races, movie nights, television commercials, high school playoff games, and most recently, Café Jordan Hare.

For the 2012 football season, fans were allowed to attend three Friday night gourmet dinners on the field before the Saturday home game. The setup included tables, chairs, leather couches, serving lines, bars, grills, a jazz band, and the kitchen sink. The restaurant was purposefully set up on the home team sideline to allow turf damage to be covered by the sideline tarp each Saturday. The main challenge was moving all the furniture and food without damaging the turf. The turf crew started painting the field earlier in the week so that all paint was dry by lunch for the Friday restaurant setup. Irrigation was also adjusted to prevent rutting the turf while moving furniture for the dinner. Designs have been pro-
duced to install a roadway around the field to simplify setting up for Café Jordan Hare, as well as setting up the sideline equipment on game days.

**COLLABORATING WITH TURFGRASS TEACHING PROGRAM**

With increased events and new challenges each year, how does the Auburn grounds crew stay ahead of the game? Well, having a turf management program right down the road doesn’t hurt. As mentioned, the athletic department has partnered with the turf program to develop research projects to help answer the challenges of maintaining athletic fields. The first project was to determine the best bermudagrass variety for shade tolerance that can handle athletic traffic. Future projects may include seedhead control of the bermudagrass varieties sold as shade tolerant grasses, infield skin research, and the relationship of spring moisture on bermudagrass transition.

Over the years, networking and discussing ideas with turf professors has developed into an extremely valuable relationship. Whether the crew is properly identifying a turf problem, researching new products on the market, or questioning a management practice, the Auburn professors are eager to help.

The most exciting benefit of Auburn’s turf management program has been working with the students. Each year, six turf students work with the grounds crew to gain experience with routine maintenance procedures, game preparations, and working special events. Students provide much appreciated help to the full-time members of the grounds crew. In return, the students are able to gain valuable experience and transfer knowledge from the classroom onto the athletic fields at Auburn.

Recently, the Auburn crew has concentrated on placing the turf students in professional level internships. Relationships established among professional level groundskeepers have benefitted both the students and the full time members of the turf crew. The goal is for Auburn turf graduates to obtain desirable jobs within the sports turf profession and, in turn, create a beneficial networking community between the Auburn University grounds crew and former students.

For the turf crew at Auburn University, each year seems to bring new challenges. Networking has become a crucial skill to prevent mistakes when special events occur on the football fields. As bizarre as some of the events appear, someone else in the sports turf profession has faced something similar and can offer valuable tips to ensure success. In today’s era of recruiting, any opportunity to promote your brand must be explored. Marketing strategies to maximize the fan experience will only bring more events onto the gridirons of the SEC. Turfgrass managers must take a proactive approach and communicate effectively to meet each challenge, while never compromising the safety and playability of the playing surface.

*Eric T. Kleypas is Director of Athletic Turfgrass, Auburn University; Philine P. F. Aldahir, is a graduate research assistant in the Department of Agronomy and Soils.*