NEW STMA OFFICERS ANNOUNCED AT CONFERENCE

George Rokosh, building and grounds manager for Du Page College in Glen Ellyn, IL, was sworn in as the new president of the Sports Turf Managers Association (STMA) during its recent conference in Houston, TX. The gavel was passed to Rokosh by outgoing president Steve Cockerham.

Rokosh played a pivotal role in the development of the Midwest Sports Turf Institute, held each June in the Chicago area. He also served as treasurer of STMA.

Twyla Hansen, grounds manager for Nebraska Wesleyan in Lincoln, NE, is the new president-elect. She will be the next president of the group.

Larry Elliot, director of sports marketing for Missouri Paint Supply in Kansas City, MO, became vice president and Dr. Gil Landry, turf specialist with the University of Georgia in Athens, became the secretary.

Mark Hodnick, supervisor of landscape services at California Polytechnic University in Pomona and acting executive director, will serve as treasurer.

The new board consists of Ken Mrock, head groundskeeper for the Chicago Bears; Greg Petry, superintendent of parks in Waukegan, IL; Dr. David Minner, associate professor of horticulture at the University of Missouri in Columbia; John Culbertson, public relations manager for Pacific Sod in Port Huemen, CA; Dale Sandin, groundskeeper for the Orange Bowl in Miami, FL; and Cockerham, who is superintendent of agricultural operations for the University of California in Riverside.

More than 120 sports turf managers attended the three-day conference in Houston. The seminars and workshops were well attended and provided both basic and advanced information on sports field construction and maintenance. Twenty companies exhibited their products during the show.

David Frey, director of properties for Stadium Corporation in Cleveland, OH, received the coveted Lawn Ranger Award during the banquet at the conference. Harry Gill, head groundskeeper for the Milwaukee Brewers, was praised for his involvement with the association. He also received the Golf & SportsTURF Man of the Year plaque and presented the Baseball Diamond of the Year Awards.

The next STMA conference will be held in San Diego, CA, in December 1991. The board has also begun a search for a paid executive director.
Barry University
continued from page 32
pulling a screen drag over the grass. He plans to continue this practice during the growing seasons.

To remove heavy thatch in the infield, Brown power-raked. "It had never been done before," he said. "I vacuumed the loose thatch and then cut the grass at one-quarter-inch. It had been three-quarter-inch before. Then I topdressed heavily and fertilized. I have maintained the grass at one-half-inch since, and plan on repeating the process right after the fall season, weather permitting."

Verticutting blades for the university's flail mower were recently added to its growing list of equipment, and Brown plans to verticut heavily in the fall, spring, and summer.

One of his largest projects last summer was the removal of the field lip. Using a sod cutter, Brown cut about four feet from first to third base. The sod was removed, as was the excess dirt. With the aid of a level, he carefully replaced the sod and repeated the process around the pitcher's mound. "I also use a hose and nozzle to blow the clay off the edges," Brown said. "I have to be very careful in doing this, or else the grass becomes lumpy and full of ridges."

Obviously there is no shortage of work, especially for one man. Still, Brown maintains that he is not a "one-man show." While he receives help with irrigation equipment repair, as well as occasional assistance from students in work-study programs, in theory he is correct. When Brown asserts that he has all the help he needs, theory, or information, is exactly what he is talking about.

Brown routinely talks shop with Ross Saylor, former superintendent of the Miami Shores Country Club, where (according to Brown) he has a reputation for asking questions. Saylor recently moved on to become superintendent at Key Biscayne Golf Course. "Ross has been extremely helpful," said Brown. "He is up on the latest techniques and shares with me constantly."

In addition to information, Saylor has shared his verticutter, topdresser, and Turf-Vac (which Brown used to vacuum loose thatch last summer) with him on several occasions. Brown also credits Jack Patterson, his boss, for sharing his knowledge of Bermuda 419. Before coming to Barry, Patterson worked on turf tracks.

In the true spirit of the Sports Turf Managers Association and its founder, Harry Gill, Brown finds exchanging ideas and practices with others in his field to be both necessary and exhilarating. He is a member of the STMA local chapter in South Florida, which was founded by George Mascaro.

"I meet with other baseball groundskeepers at STMA meetings," he said. But his ongoing education doesn't stop there. He attended two turfgrass seminars last year, and sits in on horticulture classes at the University of Florida Research Center.

Last year at the university's sports banquet, Brown received his second consecutive award for his work on the baseball diamond and soccer fields. When he rose to accept this honor, he was greeted with a standing ovation.

Several months ago a college coach from a nearby university, which was completely renovating its infield, brought his supervisor to view the field at Barry. He needed an example to show him what he wanted.

Coach Barclay uses the field as one of his most important recruiting tools, telling prospective players that the university has one of the finest fields in Florida. "I think that the biggest compliment we get is from our opponents," he said. "Every single team that's come here to play has just raved about the field."

Barclay added, "I'm pretty good friends with Bucky Dent [former all-star professional shortstop and current New York Yankee manager], and he comes down here sometimes for a few days to work with our infielders. He says the condition of this field is every bit as good as any in the major league."

And now the field has received the 1989 Beam Clay College Division Baseball Diamond of the Year Award. The Barry University diamond has been a tremendous success by any standards.

"I feel like an integral part of the teams because I have so much contact with the ball players," said Brown. "The alumni players asked me to be one of their player-coaches for the first alumni baseball game. Although I didn't graduate from Barry, I am part of the baseball program. I even get a chance to throw batting practice to the guys sometimes, and I love every minute of it."
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Historically speaking, state, city, county, and school administrators have not devoted the same concern to sports field maintenance as they have to other areas of physical plants. This is most often reflected in a sports field’s maintenance budget. Even when a field generates some revenue, it is rarely enough to support proper maintenance.

As sports field managers under these circumstances, we face a problem. How do we maintain a field on a limited budget so that it is safe for young athletes? The answer is: Go back to the basics.

Sports field management is like a large, seven-link chain. Each link supports the other, and as the saying goes, no chain is stronger than its weakest link. The following are the seven basic links in the chain which lead to a safe, healthy sports field.

Variety—We must know if the turfgrass variety we want to use is well adapted to the conditions of our area, such as temperature, wind, humidity, and moisture. For example, in conditions which are favorable for disease activity it is ideal to plant grasses with high disease resistance.

Each turfgrass variety has a different tolerance to adverse soil conditions such as compaction, poor drainage, drought, or salinity. If such soil conditions cannot be at least partially corrected, choose a turf that is best able to withstand these conditions.

Soil Preparation—Physical conditions of the soil environment can determine the extent and health of the root system. Remember, roots will neither grow where it is too dry nor where it is too wet. They only grow where the soil-air-moisture-nutrient conditions are favorable. Roots do not seek water—they grow in response to favorable moisture conditions.

Like people, roots cannot walk through "walls" but require "doors" to pass through and space in which to move. They need channels in which to grow, and these channels also permit water and air to infiltrate soils. Structureless silt and clay soils, as well as compacted soils, can severely restrict root development and growth.

Mowing—While mowing is a very basic operation, it affects most other turfgrass cultural practices. These practices are highly interrelated. A simple change in mowing height, for example, usually requires adjustment in the frequency and intensity of irrigation and fertilization.

Irrigation—Time of day for irrigation can often mean the difference between success or failure in growing grasses. Watering during the morning hours is advisable, as water pressure is the greatest, wind interference is minimal, and disease potential is low.

Water runoff is a waste of a valuable, diminishing natural resource. There are several ways to reduce this waste of water during irrigation. Better soil preparation will permit the soil to accept the water more easily. Application of water at lower rates while maintaining an even distribution, and repeat cycling, can also help conserve this precious commodity.

Fertilization—Fertilization ranks with mowing and irrigation as a primary determinant of turfgrass persistence and quality. There are mineral elements in soil that are considered vital for plant growth. The annual amount of fertilizer to be used varies not only with the specific nutrient, but also with certain environmental factors. Soil tests should be used in determining nutrient requirements and developing a fertilization program.

For certain turf types such as bermuda, the highest quality of cut can be obtained with reel mowers, which must be maintained and operated properly. Poor reel mower adjustments and dull cutting surfaces result in tearing and bruising leaves, which turn gray and then brown at the tips, and can eventually result in stunted turf growth.

Utility turf, such as bahia, is often tall and has tough seed stalks. For this reason, most utility turf is cut with rotary mowers. The cut may not be as sharp as that of reel mowers, but it is acceptable for utility turf cut above two inches, providing that the cutting edges are sharp and the blades are in balance.

Mowing height is crucial. The “effective mowing height” is the height of the grass immediately after mowing. Since mowers ride atop compressed turfgrass shoots, the effective height will be slightly higher than the mower’s mechanical height setting. But when the ground is soft, the mower may sink in enough to cause the effective mowing height to be the same as or lower than the mower’s mechanical height setting.

Mowing frequency and intervals are related to the number of days between successive mowings. Frequency can vary from daily mowing to several mowings per growing season. Infrequently-mowed turf is more coarse and open than turf mowed more frequently. For moderately to intensely cultural turfs, the One-Third Rule is generally accepted: Remove no more than one-third of the vertical shoot growth per mowing.

To encourage upright growth of grass shoots, mowing direction should be varied with successive mowings. Mowing in alternate directions is an important practice for controlling grain. Failure to change mowing direction can result in compaction and ruts in the soil.

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Frequency of irrigation is determined by many conditions, such as temperature, soil texture, porosity, type of use, vigor of the grass, and the type of sprinkler system. Duration of irrigation depends primarily on the type of sprinkler system and root depth. Soil probes can be of great assistance in determining when to water.

There is little justification for the common practice of scheduled irrigation, which can often lead to overwatering. A large number of turfgrass problems can be traced to overwatering practices.

Why do we overwater? The answer, simply, is that no one wants to underwater.

Fertilization—Fertilization ranks with mowing and irrigation as a primary determinant of turfgrass persistence and quality. There are mineral elements in soil that are considered vital for plant growth. The annual amount of fertilizer to be used varies not only with the specific nutrient, but also with certain environmental factors. Soil tests should be used in determining nutrient requirements and developing a fertilization program.

Inefficaciveness of fertilization programs can usually be traced to one or more of the following:
pH — This greatly affects nutrient availability.

Timing — For warm-season grasses, high fertilization rates during the growing season mean increased mowing and thatch.

Balance — Whenever there is an imbalance among nitrogen (N), phosphorous (P), and potassium (K) the nitrogen can be taken into the plant but not utilized, and is therefore ineffective.

Microorganisms — An active microbiological population must be maintained. This requires nitrogen and decomposable organic matter in the soil, in addition to air and water.

Aeration — The optimum time for core aeration is when the turfgrass is growing vigorously and is not subject to severe stress. Aeration releases gases from the soil and facilitates the drying of wet soil. It also stimulates root growth in the hole and improves turfgrass response to fertilizer.

Pest Control — A turfgrass pest is any organism that causes deterioration in the appearance or functional use of turf. Pests include insects, weeds, disease-causing organisms, and other destructive organisms. The proper use of pesticides and herbicides is part of a sound cultural program that ensures high-quality turf.

Pesticides vary in the hazards associated with their use and should only be applied by qualified applicators. These applicators should know the relative hazards posed by exposure and understand the words “Caution,” “Warning,” or “Danger-Poison.” They should know the lethal dosages of the chemicals they apply, and use them accordingly. In short, chemical applicators should be alert and informed, so that they read labels, wear proper protective equipment, and never change containers. To effectively control turfgrass pests, avoid waste, and abide by rules set down by the Environmental Protection Agency, these chemicals must be applied uniformly and at proper rates, as dictated by the product’s label.

As the sports turf manager, you should establish annual, flexible schedules for fertilization, preemergergence herbicides, postemergergence herbicides, disease control, nematode control, and insect control. Pesticides, insecticides, and herbicides should be carefully inventoried. Records as to where the chemicals are being applied and at what rate should also be kept.

Safe, healthy sports fields can be maintained on a limited budget. The key to success is going back to basics by attending to each of the seven links in the sports field management chain. It is always a shame when some young athlete is injured or even crippled because of an improperly maintained field. It is much easier to prevent a sports injury than repair one.

Editor’s Note: Edmund Birch is supervisor of maintenance for the Broward County, FL, School District.

**COLLEGE OFFERS TURF PROGRAM**

A two-year sports turf manager curriculum will be offered by Cuyamaca College in El Cajon, CA, beginning this fall. The program consists of classes in horticulture, plant pest and disease control, soils, principles of irrigation, landscape construction, and golf course and sports field management.

A subcommittee composed of key members in the golf course and sports turf industry was formed last year by the Ornamental Horticulture Advisory Committee of Cuyama College to explore the feasibility, procedures and requirements of a sports turf manager program at the El Cajon, CA, campus. After a year of research and discussion, objectives of the program, as well as course requirements were finalized. The total program was approved by the District Board of Directors and Curriculum Committee, and is now offered in 1989-1990 Cuyamaca College Course Catalogue.

Those interested in the program can contact: Cuyamaca College, Dept. of Ornamental Horticulture, 2950 Jamacha Rd., El Cajon, CA 92019.

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