

LANOIE JOINS CUSHMAN TO HEAD EASTERN SALES



Albert Lanoie

Albert Lanoie has been named the new district sales manager for Cushman and Ryan turf maintenance equipment in New England and the central Atlantic seaboard. He covered the territory for the past seven years for P.B.I. Gordon Corp., maker of Trimec.

Lanoie has a background rich in turf having been graduated from the Stockbridge School at the University of Massachusetts with a degree in agronomy. He was also superintendent at Potowomut Country Club in East Greenwich, Rhode Island.

EXCEL CELEBRATES 25th ANNIVERSARY

Twenty-five years ago Jonathan Mast and four associates began making cabs for tractors and combines in a back yard machine shop. This summer Excel and its distributors celebrated two important milestones, 25 years in business and \$20 million in sales.

The company still makes agricultural and industrial equipment cabs, but the landscape industry knows the company for its up-front rotary mowers with twin lever steering. Today Excel has 17 primary tractor models and 20 special attachments.

Roy Mullet, who has been president since 1962, told the crowd at the anniversary celebration, "We are strongly committed to the welfare of the community, to strive to integrate high ethics and Christian principles in our business affairs."

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JUDGE INVALIDATES WAUCONDA SPRAY LAW

Federal District Court Judge Ilana Rovner has invalidated a local ordinance in Wauconda, Ill., requiring posting of pesticide application sites and prenotification of adjacent property owners. The ordinance, adopted in July, 1984, was nullified by the judge for being preemptive of state and federal laws in late August.

The ordinance is considered a critical case for setting precedent in preemptive local pesticide legislation. Financial support from pesticide applicators across the U. S. enabled a non-profit group called the Pesticide Public Policy Foundation to hire legal assistance to fight the ordinance.

The judge ruled, "The Illinois Pesticide Act indicates a legislative desire for uniformity of pesticide regulation between Illinois and the federal government, which implies that the General Assembly intended that only the state regulate pesticide use within Illinois."

David Dietz, director of 3PF, stated, "This ruling supports our long-standing contention that local jurisdictions do not have the authority to regulate the use of pesticides. The authority for regulation clearly lies within the existing and workable federal-state regulatory system of pesticide registration and use."

"The ruling, because of its nature and because it is one of the first decisions rendered at the federal level, should be considered as a precedent in other areas of the country," Dietz stressed. He said the court's reliance on state court decisions in other jurisdictions added to the soundness of the conclusions reached in the case. Judge Rovner cited decisions in New York, Illinois, Massachusetts and New Hampshire.

HILTON HEAD TAPS HUEY FOR OPERATIONS

Eight years of experience building and maintaining golf courses for fast-paced Hilton Head Company made Ricky Huey ready for his latest promotion, manager of golf course maintenance operations.

Mark King, vice president of sports operations for Hilton Head, said Huey, "gained more experience in all facets of design, construction, and redesign of golf courses than many maintenance operators would gain in a lifetime." King said Huey will be responsible for seven golf clubs (11 golf courses) plus grass tennis courts and regulation croquet courts.

Huey will manage 150 people and will also direct the coordination of all architectural and construction operations as they relate to golf.

SAN FRANCISCO HOSTS INTERNATIONAL TURF EXPOSITION

The Golf Course Superintendents Association of America and the Sports Turf Managers Association have joined forces to provide seminars on all types of sports turf in San Francisco's Marconi Hall, Feb. 1-3, 1986.

GCSAA is providing STMA with a full day of program time on Saturday, Feb. 1, to cover athletic field management topics. More than seven days of programs and seminars on golf will be held during the week.

The annual GCSAA Conference also includes the largest U.S. exhibition of equipment, chemicals, seed and other commercial turf products from around the globe.

This is the first year STMA has not held its annual meeting in conjunction with the National Institute of Parks and Grounds Management. Instead, STMA is using the GCSAA Show as its annual meeting and will hold full-day seminars in Pomona, Ca., Valley Forge, Pa., and in the Chicago area.

For more information contact STMA, 1458 N. Euclid Ave., Ontario, Ca., 91764, or GCSAA, 1617 St. Andrews Drive, Lawrence, Ks., 66046.

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tion in parts replacement. The G2-A's connecting rod is made of heavy-duty steel, not the typical aluminum. Yamaha's new 3-stage filter requires

changing only once a year. The new fully-sealed clutch requires no service for 1,000 rounds. And G2-A's TCI Solid State Ignition eliminates the need for points and condenser, and puts an end to fouled plugs.

Yamaha's new 4-stroke of genius adds up to longer dependability and higher profitability for your fleet. Call your local Yamaha dealer today to arrange a test drive. Or for more information, call or write Yamaha Motor Corporation, Industrial/Leisure Division, 6555 Katella Avenue, Cypress, California 90630 (800) 447-4700.

YAMAHA

Demonstration Concept Works For North Texas Football Program

By Dr. William E. Knoop

For the past seven years, dozens of North Texas high schools have taken part in a football field improvement program sponsored by the Texas Agricultural Extension Service which uses a result demonstration concept.

Through various County Agricultural Agents's offices, Texas schools are provided with the expertise and guidance necessary to upgrade their athletic field maintenance programs. Each demonstration then becomes a teaching tool for other schools in the area.

One of the keys to the success of the program has been the support of the Tennessee Valley Authority (TVA). Not only does the program demonstrate the value of sound maintenance, it is also demonstrating the value of using sulfur-coated urea as a nitrogen source.

This fall there are 37 high school football fields in the demonstration program. The payoff is not only better looking football fields, but much safer fields with fewer injuries.

There is no magic in maintenance of athletic fields. Adherence to the tried and true basic turfgrass maintenance principles discussed below will, if followed, produce a superior field.



Aerification is a major step toward improving fields and a must for fields under tight budgets.

Mowing

Each turfgrass has an ideal height-of-cut. Since most athletic fields are either common bermudagrass or one of the "named" bermudagrass varieties, there are really only two different heights-of-cut to consider.

The best cutting height for common bermudagrass is about 1-1/2 inches. All the others, such as Tifway (419), Tifgreen (328), or Texturf-10 should be cut in the 1- to 1-1/2 inch range.

Generally, if these grasses are cut below the recommended height they will tend to thin out and be less tolerant of heavy use. At cutting heights much above the suggested height bermudagrass tends to become stemmy. All the leaves are produced near the end of the upright stem and the turf becomes very susceptible to scalping.

Failure to mow at proper intervals can be one of the most abused aspects of turfgrass maintenance. Ideally, a field should be cut at a point when no more than one third of the leaf surface is removed at one

TABLE ONE: FERTILIZER TIMING

Fertilizer Analysis	Nitrogen Source	Application Date	Lbs. N 1,000 ft.	Lbs. Fert. 1,000 ft.	Lbs. Fert. Football Field*
15-5-10	soluble	April 15	1.3	8.7	500
		June 1	1.3	8.7	500
		July 15	1.3	8.7	500
		Sept. 1	1.3	8.7	500
		Total	5.2	2000	
15-5-10	50 or 100% S.C.U.**	April 15	1.6	10.7	600
		June 15	1.6	10.7	600
		Aug. 15	2.0	13.4	800
		Total	5.2	2000	
19-5-9	50% S.C.U.	April 15	1.7	9.0	500
		June 15	1.7	9.0	500
		Aug. 15	1.7	9.0	500
		Total	5.1	2000	

* A football field is 57,600 sq. ft.

** Sulfur Coated Urea

mowing. For a common bermudagrass field, the turf should be cut once it reaches a height of 2-1/4 inches. The named bermudagrasses should be cut when they reach a height of 1-1/2 inches. Generally, this means a field should be cut about twice per week.

Reel mowers offer the best cut in terms of quality, followed by rotary and then flail mowers. Regardless of the type of mower, blades should be kept sharp.

Irrigation

Maintaining a quality athletic field without irrigation in Texas is extremely difficult. Many athletic fields are constructed on soils containing a high amount of clay that shrinks when it is dry and expands when it is wet. During dry periods, many of these fields may develop soil cracks that are several inches across and many inches deep. These non-irrigated fields may not be safe for play.

The frequency and duration of irrigation is dependent on many environmental factors as well as those limitations imposed by design of the irrigation system. Ideally the system should be able to provide enough water over a reasonable time period to wet the soil to a depth of four to six inches. The soil should then be allowed to become nearly dry before the next irrigation.

Since many fields are constructed from high clay soils, it may not be possible to

apply enough water in one cycle to wet the soil deeply before water begins to run off. When runoff occurs, stop irrigating and let the water soak into the field. It may be necessary to repeat this type of a cycle several times before irrigation is complete.

Allow the field to dry out until "footprinting" occurs. This is when the plant has a low water content and does not bounce back after it has been stepped on or driven over.

If turf is irrigated too frequently and the surface stays wet for an extended period, it tends to be more susceptible to disease, accumulate thatch, and becomes more shallow-rooted.

Aerification

The roots of a turfgrass plant take in oxygen and give off carbon dioxide. An average soil contains about 45 percent mineral, five percent organic matter, 25 percent water and 25 percent air.

When a soil receives an abnormally high amount of traffic, as do many athletic fields, the amount of air space in the soil is slowly reduced. This results in a gradual thinning of the turf because the soil has been compacted.

Between the hash marks of football fields and the areas near soccer goals are good examples of areas prone to soil compaction.

As the sand content of a given soil

increases, it becomes less subject to compaction. Conversely, as the clay content of a soil increases, it becomes compacted more easily.

Since most athletic field soils have a high clay content, it becomes very important to consider the turfgrass maintenance procedure designed to counteract soil compaction-aerification, also known as coring.

Aerification involves use of a machine that inserts a hollow or solid metal tine into the soil to a depth of two to three inches. A core of soil is displaced by hollow tines and discarded on the surface, where it will slowly decompose.

The hole left during this process will allow greater amounts of oxygen to reach the root system and greater amounts of carbon dioxide to escape. These holes also allow freer movement of water, nutrients and pesticides into the soil. Aerification is the only way a soil can be tilled without seriously disturbing the turf.

Every athletic field should be aerified at least once a year. Heavy-use fields and fields that have a thin turf may need to be aerified once a month during the growing season. Once a month aerification is not too often for fields that have a high clay soil.

Fertilization

A good fertilizer applied at the right time is an important part of any athletic

continued on page 29

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What some of the most promising young athletes are wearing this year.

It's a crying shame to cripple young talent before it has half a chance to mature . . .

The National Sports Turf Research and Education Committee, sponsored by The Musser International Turfgrass Foundation, is a result of Sports Turf Forum I held at Beltsville, Maryland, in April, 1985.

The primary concern of this committee is the number of discomfiting and disabling accidents suffered by young school children through, and including, professional athletes. This committee has dedicated itself to the reduction of injuries by improving the quality of turfgrass playing surfaces.

The initial report from Sports Turf Forum I, and subsequent periodic publications, are

available to sports turfgrass organizations by writing:

Dr. Fred V. Grau, Chairman
STR&E Committee
PO Box AA
College Park, MD 20740

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Texas

continued from page 25

field maintenance program. For most fields, a 3:1:1 or 4:1:2 ratio of nitrogen:phosphorus:potassium will do a good job. A three- or four-application program is recommended for Texas football fields (See Table One).

Pest Control

Weeds are a very common problem on many athletic fields. Control is based upon classification of the weed.

Grassy weeds include crabgrass, goosegrass, dallisgrass, etc. Herbicides typically used to control grassy weeds are MSMA and DSMA.

Broadleaf weeds include henbit, goat-head, etc. The herbicides 2,4-D, MCP, and Dicamba are often used to control broadleaf weeds. Trimec is a combination of all three.

Many major weeds can be controlled before they germinate with preemergence herbicides (Balan, Betasan, Dacthal, Ronstar, pendamethalin, siduron, etc.). These products will prevent germination of crabgrass, annual bluegrass, and other major weeds for periods of three or more weeks.

Another way to control weeds is during the dormant season. While bermudagrass is dormant, glyphosate (Roundup) can be applied without harm to

the bermudagrass and it will kill active weeds. Make sure the bermudagrass is dormant first.

The only insect pest of significance on athletic fields is the white grub. If they are a problem, it is usually after August 1.

Signs of white grub damage include patches of wilted turf that do not recover with irrigation. If more than five grubs are discovered per cubic foot of soil, treatment with diazinon or dursban is suggested. A wetting agent mixed with the insecticide spray will facilitate movement of the pesticide into the soil where the grubs are.

Diseases of bermudagrass are fairly rare. Most diseases of turfgrass require free water or very high humidity to infect a plant. In most of Texas, the humidity is fairly low during the bermuda growing season. One of the best methods of disease control is the proper use of irrigation.

Texas Agricultural Extension Service has a similar program for baseball fields. A description of this program will be presented in the next issue of SportsTurf.



Editor's Note: Dr. William Knoop is a turf specialist with the Texas Agricultural Extension Service, Dallas. He has spent considerable time working with sports fields in his region and is organizing a sports turf workshop for next spring in Dallas.

TABLE TWO: WEED CONTROL

Weed Type	Chemical	Trade Names
Summer grassy	MSMA, DSMA	Various
Summer broadleaves	2,4-D, MCP, Dicamba combinations	Trimec, TrexSan
All winter weeds (Spot apply when bermuda is dormant.)	Glyphosate	Kleen-Up or Round-Up

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