



Princeton Turf of KC

How Do You Run A Sod Farm In the City?

Like a Business

SOD PRODUCERS who know him well have good-naturedly accused William M. Latta of trying to run a sod farm at 90 miles an hour. They know his background as a charter pilot and crop duster and know also that his partner, Dean Scholes, is a pilot.

Customers and visitors might be easily convinced as well, upon noting that practically every piece of machinery rolls on airplane tires.

Perhaps the only relevance to sod farming of the 90 mph anecdote is that it is expressive of how fast Latta-Scholes, Inc., updates its operating techniques. Certainly it is indicative of how quick Bill Latta learned the business of growing cultivated turf.

Just a little more than five years ago, one of Latta's charter passengers had mentioned ownership of a sod farm. Latta's reply had been: "What's a sod farm?"

Among the factors that make Latta-Scholes, Inc., unique is the fact that both owners were successful businessmen before they were sod growers. Therefore, at the very beginning, they approached the growing of sod as a business as opposed

to "traditional farming" in which the product was different.

Location helps relate it to city business rather than country farming. Princeton Turf of Kansas City, as the business is more commonly known, is a sod farm that's within a city within cities.

That description is not a duplication error. Princeton Turf is situated along the banks of the Missouri River within the city limits of Riverside, Mo., which is surrounded by Kansas City, Mo., Kansas City, Kan., and Parkville, Mo. As the crow flies, it is fewer than three miles to the heart of this U. S. megalopolis of more than 1.2 million people.

In addition to the whole range of daily reminders that it is urban located, in a few years an interstate highway will slice off about 90 acres of the 600-acre farm.

Strict Business Principles

Dean Scholes pays particular attention to the business side of the operation. Cost-accounting is carried to a refined degree and reacted to religiously.

"We prepare a net worth and op-

erating statement every 30 days," said Scholes. "We analyze acres sold to acres cut, projecting our cost per acre when we sell 100% of it, 75%, or 50%."

Precise cost-accounting enables Princeton Turf to establish a uniform and consistent pricing policy. Customers in effect can set their unit price by their volume of purchases.

A cent per square yard discount is allowed as purchases reach a certain volume. The first penny comes at 3,000 square yards. Additional penny discounts come at 12,000, 25,000, 50,000, 75,000, 100,000 and 200,000.

"A customer's purchases in square yards during one year then determine his base price for the coming year," said Scholes.

"What we're trying to do is set up the farm and run it on sound business principles."

A Decade Earlier

Latta and Scholes probably would have listened with disbelief if they had been told a decade ago that in 1969 they would be selling Kentucky blue, Merion, Fylking, Windsor blue-



Dean Scholes and William Latta



grass and fescue mix, K-31 tall fescue, Penncross bent, Cohansey C-7, Meyer zoysia, Midway and Tifgreen bermudagrass.

Kansas Scholes would have been involved in feed milling machinery business, after the alfalfa dehydrating business, after serving as a pilot in the Air Transport Command during World War II.

In a couple of years, he would go to work for Princeton Turf, Cranbury, N. J., direct the first seeding of a farm at Centerville, Md., and in March of 1964 do the same in Kansas City. He and Bill Latta then purchased on Jan. 1, 1968, the Kansas City farm and one at Eagle Pass, Tex. The purchase agreement included retaining the Princeton Turf brand name.

Nebraskan Latta, a decade ago, was wrapped up in a highly successful charter flying service, Cessna dealership and equipment repair, and a crop dusting service. Operations were at Hastings and Grand Island. At one time he owned 13 airplanes.

He had learned to fly while attending college at Hastings. His aircraft business evolved out of a flying school he operated after World

War II. As far as he knows, he's the only individual the Air Force contracted with to teach ground school. All other contracts were with educational institutions.

Asking about a sod farm initiated the abrupt change in his career. What facilitated the change was being lucky, he said, of finding buyers "at the right price" of his various flying enterprises. He sold part in 1964 and the rest by 1968. In addition to his partnership in Latta-Scholes, he has an interest in Grassland Farms, Inc., at Hastings and a nursery at Scottsdale, Ariz.

Competition to Increase

Latta seems to have the knack of recognizing the birth of a new industry and of measuring its eventual growth. He was the second resident crop duster in Nebraska. He believes the turf industry "is about where aviation was when I got into it."

"Few people realize how large and important an industry it is," he said. "They don't realize, either, how much can be invested in growing sod. All they see is grass growing by itself."

Latta believes a "shake out" in

Almost all 600 acres of Princeton Turf of Kansas City is visible above. It's Missouri River bottomland within the city limits of Riverside, a KC suburb.

the industry will come eventually as the business of growing sod becomes more professional. The capital required to continue to mechanize and automate will be a strong factor.

It is easy to invest from \$600 to \$800 per acre in equipment, he said. Irrigation costs alone can run as high as \$400. In addition, there's premium land to pay for and expensive labor to hire. Princeton Turf of KC has a work force of 30.

Latta and Scholes figure to avoid being shaken out of the industry by strictly adhering to business principles and by learning to raise cultivated turf as scientifically as possible.

Farm Fertilizer-Mapped

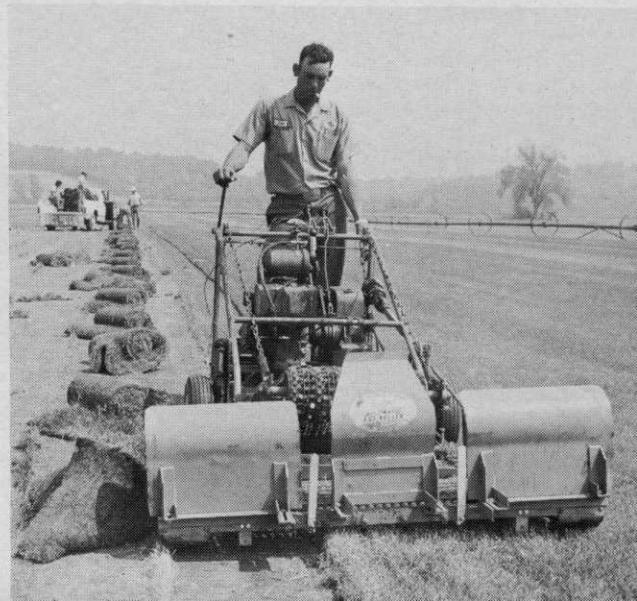
"Our fertilizer program begins with a soil analysis," said Latta.

The total farm has been mapped and subdivided into four-acre increments. Seven soil samples were taken from each grid and a com-

Wade Stith of West Point Products Corp., and Latta inspect a field of Fylking bluegrass.



Princeton Turf of KC harvests sod with Ryan cutting and rolling equipment. An elevator loads bigger trucks.





Latta and Stith check the growth difference of grass planted conventionally (small clumps in rows) and grass planted with the use of the West Point Aerifier (pointing with left hand). His right hand rests on a strip left from the previous

posite determined as the basis for fertilization.

"All scientific data had indicated we didn't need potash and phosphorus. Then we asked the grass."

The asking comes in the form of plot experimentation with different rates and combinations of plant nutrients. "And we always accidentally on purpose miss a spot with our fertilizer to serve as a check."

"We're beginning to take plant tissue samples, hoping to learn quicker why one grass section looks better than another."

As standard procedure, nitrogen is applied three times in the fall and twice in the spring; herbiciding is done once in the fall and once in spring.

Final quality control is achieved with daily "grass patrols," said Latta, in which we "play doctor, operating with a curative philosophy. A total preventive program would be too expensive."

Five-Year Field History

This laboratory-precise technique of fertilizing is just a small, though important, example of the overall Latta-Scholes scientific approach.

A complete history of the 13 primary fields has been compiled since 1964. Everything that is done to the land is recorded. A clipboard for each field hangs in the office with date notations for such things as mowing, rainfall, crustbusting, fer-



harvest. The close-up picture shows the growth advantage that the grass achieved in growing out of the holes created by the Aerifier's spoon-like blades.

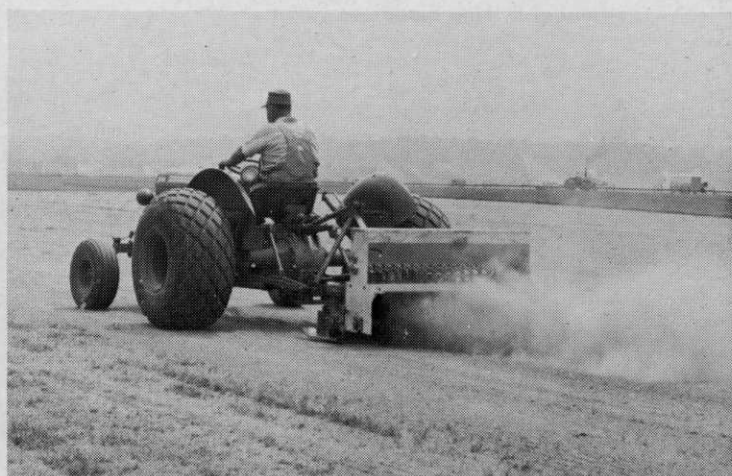
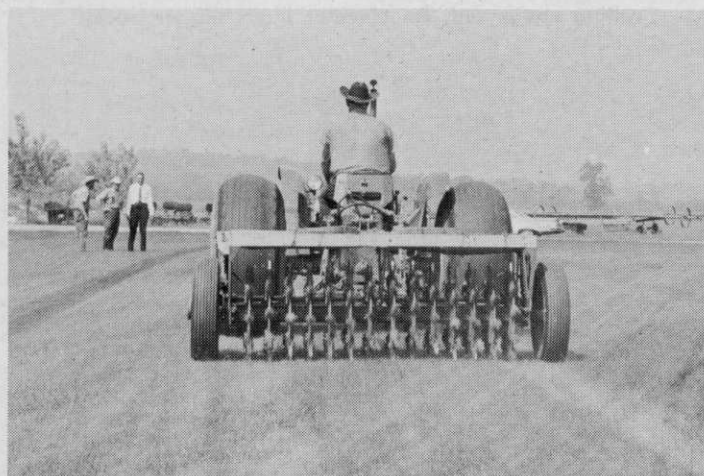


tilizing, seeding, disking, tool-barring, harrowing, leveling, rolling, irrigating, spraying, and so on.

"If we happen to do something right, we can look back and tell what it was," explained Latta.

A deep-well irrigation system provides 1,600 gal./min. at 60 psi. Valves are installed every 180 feet. Sprinkler diameter is 80 feet, including a 10-ft. overlap.

The answer to how Latta arrived at the equipment cost per acre becomes apparent as he lists major items of equipment: seven tractors, the largest of which is a Minneapolis-Moline G-1000, an Everson land leveler, Ryan sod-cutting and sod rolling equipment, a deep chisel,



To minimize compaction, Latta and Scholes have mounted field equipment on airplane tires . . .

field cultivator, spring-tooth harrow, two 11-gang and one 7-gang Jacobsen pull type mowers, one 7-gang Jacobsen self-propelled mower, one 7-gang Roseman pull-type mower, a Rogers sweeper and disk seeder, and a Viking seeder.

Trying Different Feeding Approach

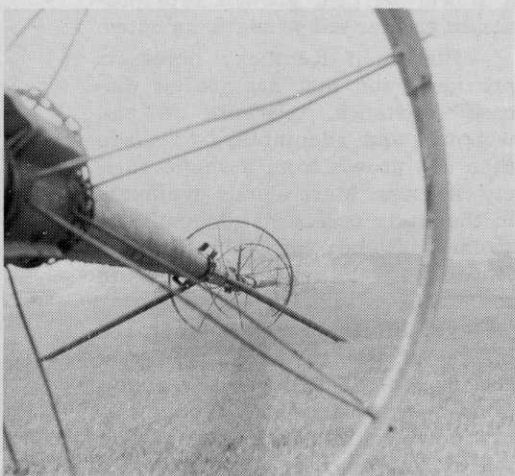
Latta and Scholes have experimented with a minimum-tillage approach to seeding using a West Point Aerifier. As soon as sod is removed, the Aerifier is pulled across the field a number of times creating hook-shaped holes. The field is then seeded. In six months' time grass planted by this method is well ahead of fields planted in the compacted rows by conventional seeders.

"It looks like this method may save time and trips over the field between harvests," Latta observed.

The Aerifier also has been used over turf just before harvesting. The puncturing seems to increase the sod's water holding capacity and quickens water absorption.

Latta has found that new techniques for growing sod can come about in unusual ways. A few years ago, he hired some school boys to plant zoysia plugs. Left unsupervised for a time, they decided to throw the plugs at each other rather than plant them.

Latta's disgust at their performance melted away as he noted that nearly every plug landed right side up for growing on the ground. His next step was to replace the boys with a manure spreader as the method for throwing the plugs. But their mischievous act led to a successful method of establishing a zoysia nursery. Latta has since changed and improved his method for establishing zoysia sod, and experiences in this endeavor will be the subject of an article in a coming issue.



... with a few exceptions.



Dr. Joseph M. Duich, left, Pennsylvania State University, receives the certificate that indicates he is now an honorary member of the Merion Bluegrass Association. The presenters are Dr. Fred Grau, only other living person so honored, and Margaret Herbst, director of information for the Merion Bluegrass Association.

Dr. Duich, who wrote his doctorate on Merion, has been active in breeder nursery research since his graduate student days. He helped develop Pennpar Creeping Bent and Pennstar Kentucky Bluegrass. At Penn State, he is in charge of the largest student teaching program in turfgrass, which has trained 250 golf superintendents.

Dr. Duich received the recognition at the Beltsville Field Day, an appropriate site because the original B-27 bluegrass was brought to Beltsville for trial.

NW Turfgrass Association Announces 1970 Officers

Tom Keel was elected president of the Northwest Turfgrass Association at its recent 23rd annual conference. He is director of Douglas County Park Dept., Roseburg, Ore.

Other new officers elected at the conference, held in Hayden Lake, Idaho, are: Vice-president, Doug Weddle of Tumwater Valley Golf Course, Olympia, Wash.; treasurer, Dick Haskell of Jackson Park Municipal Golf Course, Seattle, Wash.; and executive secretary, Dr. Roy L. Goss of the Puyallup, Wash., Research Center.

The Association's new board of directors includes John Harrison of Idaho; Dick Malpass and Al Blair of Oregon; Art Elliott, Glenn Proctor, Dick Schmidt, Weddle and Haskell of Washington, and Dick Mitchell of British Columbia.

Membership in the Association is composed of some 400 park and recreation administrators, golf course, industry, and school personnel from Washington, Oregon, Idaho, Montana, and British Columbia. The Association sponsors research centers at Washington State University, Puyallup, and Oregon State University, Corvallis.

The 24th annual conference will be held at Salishan Lodge, Ore.

AMERICAN SOD PRODUCERS ASSOCIATION invites your participation

If you are a Sod Grower you should be
a member of ASPA.

Keep in touch with progress.
Allied Industries are welcome.

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