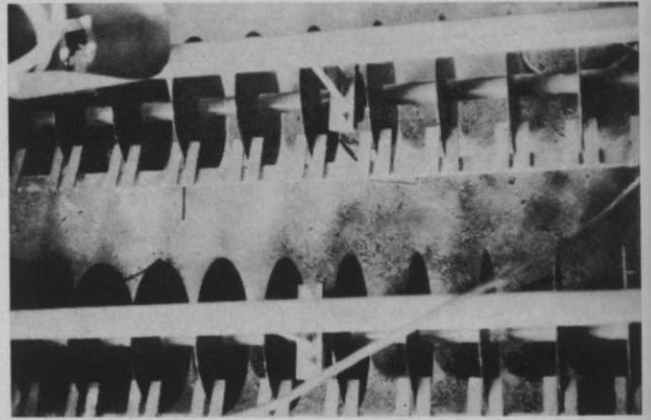




Fully automatic turf planter, used for golf course fairways and other large turf areas, scatter sprigs uniformly and is self-feeding.



Inside view of the automatic, self-feeding planter shows two sets of disks that slice the soil and press sprigs into a groove.

Automatic Machines, Efficiency, Good Turf Practices Combine to Overcome Rising Costs

By E. RAY JENSEN

Southern Turf Nurseries
Tifton, Georgia

Nearly all progress in the field of planting grass in the South has been initiated with new hybrid bermudagrasses. Due to higher labor costs and customer demands for better results, improved methods have become a necessity. New planting techniques have reduced planting costs, given better stands, and accelerated turf coverage. Even though bermudagrass is still considered the workhorse of southern turf grasses, many of the methods used to plant it can be used also to plant other stoloniferous grasses.

New Automatic Planter Feeds Itself

The newest development in fairway planting is a fully automatic, self-feeding machine. It has made planting golf course fairways and large turf areas much easier. Sod fed from a tray and rotating cylinder eliminates hand broadcasting, and the planter scatters sprigs uniformly over the soil. Sprigs are pressed in the soil by two sets of disks, and then the soil is packed by a heavy roller before the sprigs are exposed to the sun and dry weather. Track marks are almost nonexistent, since the machine is supported constantly

by disks and rollers except during turns. Its hopper has the rather large capacity to hold 100 bushels of sprigs, thus time consumed by reloading is shortened. Two good operators can plant up to 15 acres per day.

Many relatively small areas such as football fields, lawns, and tees are still planted by the unit commonly known as the Tifton Turf Planter. This is simply a tractor-drawn, straight disk-type planter that has two sets of 12-inch disks welded 4 inches apart to a 6-foot wide shaft. One set of disks is offset and trails the other. A flat roller is attached and follows to firm the soil around the freshly planted stolons. These units have been used to plant considerable amounts of grass.

The Tifton Turf Planter method, though much faster than older methods, still has the disadvantage of requiring hand labor to broadcast stolons. Also, the planter is not heavy enough to completely obliterate impressions left by the tractor wheels.

This is important where close mowing is required and where golf cart traffic is expected.

Two-row Planter Inserts New Bermudagrasses

For introducing improved hybrid bermudagrasses into existing bermuda or weedy sods, a modified planter is presently the best available. Originally it was designed to plant coastal bermudagrass pastures. This machine is semi-automatic. It plants grass rows by splitting the old sod or grass surface with a coulter disk and winged-shoe. Stolons fall into the opened furrows which are then closed by slanted tires and pressed with rollers. A two-row planter of this type will cover up to six acres per day installing grass at 12-inch centers. Stands are somewhat more erratic than those planted by straight disk machines, and coverage in unprepared seedbeds is slower. The semi-automatic planter offers the direct advantage of allowing the fairway to remain in play. Also costs are reduced because the necessity for reworking old seedbeds is eliminated.

Newly planted hybrids become the dominant species within one to three years depending

on the degree of competition from older vegetation.

High Labor Costs Demand Efficiency

Other planting methods are numerous and vary from hand sprigging to "Rube Goldberg" automatics. Entire golf courses have been planted with tobacco and cabbage planters, but high labor costs and demands for quick results make economy and efficiency paramount.

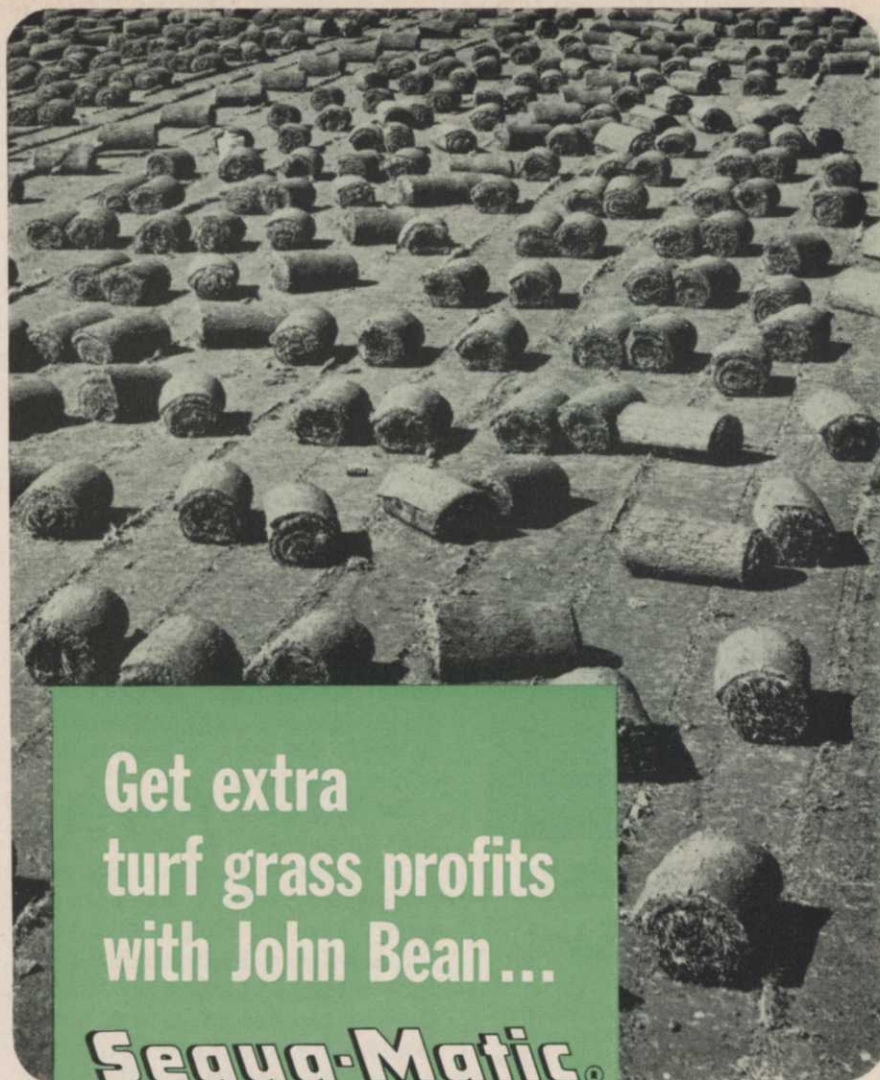
Land Prep, Plant Care Determines Success

Planting systems and machinery are important in getting the job done, but preplanting land preparation and postplanting maintenance are just as important. Regardless of the methods, failure is just around the corner unless sprigs are given a proper bed and care.

Points to remember are few and quite simple, yet we often see poor turf stands because basic rules are ignored. It is essential that sprigs be placed in the proper soil medium. Worked-up topsoil should be smooth and free of tracks. Sprigs need to be partially embedded beneath the soil surface. Soil should be soft enough for a disk or coulter to penetrate 1 to 2 inches, and new seedbeds need to be soft enough to permit uninhibited root growth during the early life of the plant.

Soil should be supplemented with fertilizer at 100 to 150 pounds of phosphorus and 150 to 200 pounds of potassium per acre, depending upon local soil requirements. Less nitrogen is required to start the plants, and 20 to 40 pounds of nitrogen per acre is usually adequate. We normally fertilize seedbeds with 800 to 1000 pounds of 5-10-15 per acre. Fertilizer should be scratched lightly into the upper 1 or 2 inches of topsoil. This can be done during the final "floating-cut" operation.

Heavy demand for nitrogen comes after the grass puts on new leaf growth. Within a week to ten days after planting, frequent but light applications of



Get extra
turf grass profits
with John Bean...
Sequa-Matic.

- Install Sequa-Matic to get faster, more even growth. With Sequa-Matic, water distribution can be tailored to put the amount you want where you want it, automatically.

Sequa-Matic is a completely automatic, pressure actuated and operated system. It moves the sprinkling operation from the mainline to the end of the field, beginning simultaneously with the first sprinkler in each lateral. Since only one sprinkler per lateral operates at a time, economical small diameter pipe can be used. You set the sprinkling schedule you desire on the Sequence Timer Control. No further attention is required. Sequa-Matic gives optimum moisture control through maximum utilization of the water applied. The solid, grid-type installation means low labor costs, too. For more information and literature on Sequa-Matic for commercial turf installation, write to: Dept. 33

Also, ask about Sequa-Matic plastic valves for underground systems.

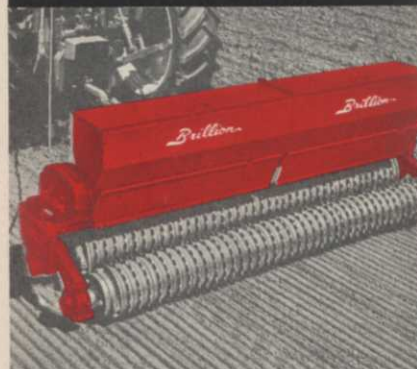


JOHN BEAN
DIVISION

San Jose, Calif. Lansing, Mich. Orlando, Fla.



Our well-known 5'4" model



and NEW 8' and 10' seeders

are not FREE ...but almost!

The savings on seed alone will often pay for your Brillion landscape seeder in just a few days of use. And that's only the beginning.

A Brillion conditions the seedbed and seeds in one pass — *without additional help, equipment, or operations.* Its front rollers crush lumps, press down small stones, and pack the soil into a clod-free seedbed — exclusive brush agitators accurately meter out seed even at heavy seeding rates — and the smaller rear wheels gently firm the moist earth around the seeds for fast, complete germination and healthier growth.

So give yourself a Brillion landscape seeder — 5'4", 8' and 10' seeding widths. It pays for itself in a few days of use. Send coupon.

NEW — 3-point Category 2 pick-up now available on 8-ft. seeders.

Brillion

BRILLION IRON WORKS, INC.
Dept. LS-59-7, Brillion, Wis. 54110

Please send information on:

- 5'4" Seeder New Smooth Roll Pulverizer
 New 10' Seeder
 New 8' Seeder
 Name of nearest Brillion dealer

Name.....

Address.....

City.....

State..... Zip.....



Three weeks after planting Tifton dwarf bermudagrass, a dense mat of entwined turf begins to form on the course left level by the automatic sprig planter.

ammonium nitrate, or another fast-release form of nitrogen is needed. This additional nitrogen assures fast-growing and healthy turf. About four weeks after planting, we find it worth while to apply an extra 400 pounds of 5-10-15 per acre.

To determine the amounts of lime needed in the soil, it is best to have the soil tested. For bermudagrass, soil pH should range from 5.5 to 7.0. However, if your soil is below pH 6.0 (acidic) then lime applications are advisable. Usually one ton of lime per acre is adequate, and it can be applied before the fertilizer and should be harrowed 3 or 4 inches deep.

Grass should be irrigated within the first hour after it is planted and the soil kept moist continuously for two weeks.

The best planting time for bermudagrass is from March 1 to



Tifton dwarf bermudagrass sprigs were rolled immediately after being planted leaving the soil smooth and uncut.

Natural Gas Harmless to Trees

In the article entitled "How to Diagnose Tree Diseases," WTT May '66, there appeared on page 28, a statement to the effect that heavy concentrations of natural gas is one of the factors which usually results in sudden death of a tree. Also in the same paragraph it was stated that natural gas leaks will make trees become progressively weaker over a period of years.

Dr. Pirone, who is listed as one of the co-authors of this article, advised the publisher that he is not in agreement with these statements and that on the contrary, he has on numerous occasions gone on record in support of the position that natural gas does not affect trees.

November 1 in the Deep South, and April 15 to September 1 in the Middle South. Bermudas planted too late may suffer winter kill, and those planted too early may rot in the cold soil before they take root. Extremely late or early plantings are risks that always should be avoided.

30 Graduate From PSU Turfgrass Course

Representatives from 10 states and 2 Canadian provinces made up the graduating class of 30 students who completed work this spring in the Pennsylvania State University Turfgrass Management Winter Course.

Since the first course started in 1957, over 80% of the graduates have found employment in turf maintenance or a related field. The Turfgrass Management Winter Course consists of two eight-week terms a year in each of two years. Six-month summer periods between the second and third terms are used for on-the-job training.

Individuals with turf maintenance experience are given priority in admission to the course. High school graduates are also