# Southern Turf's 300 Acres Produce Sod for Golf Courses As Far Away As Japan, India

Operation of a successful turfgrass business is divided into three parts, as E. Ray Jensen, president and operator of the Southern Turf Nurseries in Tifton, Ga., sees it: (1) know your product; (2) honesty; and (3) hard work.

"All are equally important," according to Jensen, who has been in full-time production of turf grasses for the past 10 years, and in part-time production five years before that time.

On these three concepts he has built a business which reaches into the golf course and recreation fields, and other enterprises in the far parts of the United States, and as far away as India and Japan. He has built, from a meager beginning, a production expanse of 300 acres, and has acquired machinery valued at \$145,000, some of which he designed himself and had built to order. Jensen also has a twinengine Comanche plane, which he pilots himself. Most of his more than 100,000 miles a year of travel are by plane.

Southern Turf Nurseries is a partnership between Ray Jensen



Ray Jensen, company president, examines Tifton Dwarf hybrid bermuda on test plot at rear of Tifton, Ga. farm.

By PAULINE T. STEPHENS



Raking up old turf on fairway, Southern Turf crewman readies soil for replanting new grass.

and his two daughters, Mrs. Larry Wheeler (Mary) and Anna Jensen. Ray is president and his wife helps out in the office at special times.

President Jensen has an excellent background for turf planting and growing. Before he was a turf man he was a soil scientist. Born on a small farm at Fountain Green, Utah, he earned a degree in soils and agronomy at Utah State University in 1940.

In 1941 he began work with the Soil Conservation Service in Washington, D. C. as agricultural census and land appraiser, a post he held a year. Then he trekked to Mississippi and spent a year and a half with the SCS before going to Perry, Ga., as area scientist, transferring to Tifton in 1946 in a similar position.

In 1951, while with the SCS, Jensen started in the grass business in a limited way, beginning with a few leased acres on which he planted centipede and hybrid bermudagrasses that had been developed at the Coastal Plain Experiment Station in Tifton, Ga. Working with him in this first production was Dr. B. P. Robinson, who at that time was a research scientist at the Coastal Plain Experiment Station.

In 1951, Jensen produced the first Tifton 57 (Tiflawn), a hybrid bermuda, that had been grown away from the Coastal Plain Experiment Station, where it was developed.

#### **Began With 60 Acres**

In 1955 Jensen left the Soil Conservation Service and went into full-time production of centipede and bermudagrasses. He planted about 40 acres of sod in Brooks County near the Florida line, and 20 acres in Tift County near Omega (in middle south Georgia) on land he purchased.

Now he has 1,400 acres of land, most of it in Tift County near Omega, where 260 acres are in sod. In addition there are 40 acres in sod in Brooks County.

Of the total acreage of sod, about 100 acres are devoted to centipede, most of which is used to produce seed for combining. The combined seed is sold to commercial distributors. The other 200 acres are in hybrid bermudas.

Plantings of hybrid bermudas are as follows: 30% Tifton 419 (Tifway); 20% Tifton 328 (Tifgreen), and 10% Tifton 57 (Tiflawn); 10% Tifton Dwarf; and 30% Ormond bermuda.

The three first ones listed were developed at the Coastal Plain Experiment Station. Tifton Dwarf is a dark green bermuda with stump leaf which grew as a mutation from 328 Tifton bermuda at Glen Arvin Country Club at Thomasville, Ga. Ormond bermuda came out of Florida, and Jensen was the first person to grow it for certification. He obtained it from the University of Florida.

#### Uses One Room As Lab

Ray Jensen has one room of his office at 1620 North Park Ave. in Tifton which he uses as a laboratory, and also has the part-time assistance of two scientists who have experimented with soil mixtures for greens, fairways, and other turf.

Based on his knowledge of the grasses and the climatic and soil conditions under which each grows, Jensen knows where to plant the various types of grasses.

Tifton Dwarf and Tifton 328 are planted on golf greens, Tifton 419 and Ormond on fairways; and 419 on tees. When there is a call for a grass for as far north as Indiana and Missouri (he recently completed a golf course in Jefferson City, Mo.), Southern Turf uses Tifton 328 and Tifton 419 because they can better withstand the rigors of the winter weather in those areas.

Tifton 419 and 328 are so versatile that they can be grown in many places, Jensen believes. He has planted them successfully in Puerto Rico. Last year he airshipped enough stolons of Tifton Dwarf to plant a large nursery for a golf course in Japan. He flew over to Japan by commercial airline to lecture to golf course superintendents and to demonstrate planting methods for them. He shipped the planting machinery over there about a month before he went himself.

#### Sells 800,000 Sq. Yds./Year

Southern Turf Nurseries estimates very roughly that it sells about 800,000 square yards, or bushels, of turf a year.

It takes out two crops a year from most of its sod. The harvester Jensen uses is so designed as to leave enough root stock to re-establish the field in new turf. Since bermudas grow very fast in this Georgia climate, the sod is ready for another harvest within 8 to 14 weeks.

Jensen sells about 85% of his grass to golf courses, 10% for residential use, 4% for athletic fields, and 1% for miscellaneous uses. He does some of his projects on a bid basis, but most of them are negotiated.

#### Sells, Consults, Plants

This Tifton sod grower provides three types of services. He (1) furnishes and plants certified seed, and provides consulting service; (2) furnishes and plants certified grass (without consulting service); and (3) provides planting stock.

Over the years Jensen has served as consultant to 30 or more turf growers, mostly golf clubs. He usually flies to these projects about once every eight weeks, over a period of one to two years.

He is consultant for one large hotel golf course in Puerto Rico, and on one occasion flew to Ha-



waii to advise on planting golf courses for Laurance Rockefeller.

He has air-shipped grass to many foreign countries, including Japan, India, Italy, Malaya, Israel, South America, Spain, Ethiopia, and others.

Most of the Southern Turf's sales are directly to customers. Only a small portion is sold through distributors, except in the case of centipede seed. Since centipedegrass is strictly a lawn truck body in a heap, and, unless the weather is excessively dry, it is not watered until after it is planted.

"Our workers try to drive to a job overnight," Jensen explained. "However, if it is too far for overnight, they simply drive in the daytime too and the grass crusts over, but it keeps well in the mass."

While Southern Turf always plants grass while it is green and fresh, a mass of grass will keep



Weed control plots at Southern Turf Nurseries help determine most effective herbicides to use on its farm. Company spends over \$2,400 on weedkillers each year; \$24,000 for fertilizers.

grass, and since Southern Turf minors in lawn sods, centipede sod is a minor part of total sales. However, it produces about five tons of centipede seed in the fall, selling it through distributors.

Jensen delivers stolons to customers by truck, whether he plants the grass, or simply sells the plants. Of course sprigs are air-shipped to foreign countries.

The stolons are dug with a specially designed harvesting machine which Mr. Jensen himself collaborated in designing and had made at Tifton Machine Works in Tifton, Ga. The only other machine like it belongs to Patten Seed Company of Lakeland, Ga.

This machine, which is attached to an 85-horsepower tractor, cuts under the turf, shreds it, and blows it through a long pipe into the dump-body of a truck.

"We can tell how many bushels are in the truck by measuring the amount dug in the field," Jensen said.

The grass is piled into the

alive for 5 to 10 days, Mr. Jensen pointed out.

When solid sod is sold, which is seldom, the firm uses a commercial truck and loads the sod in layers.

#### **Uses On-the-Spot Labor**

Jensen has nine planting superintendents who drive the trucks with the grass to the job. They never carry labor with them, but find men to work wherever they go to set out the stolons. Southern Turf often has seven or eight jobs going at one time, and sometimes has 100 laborers at work, along with the superintendents. The superintendents use from one to 15 laborers on a job, depending on the size of the area to be planted.

"Fifteen workers can usually plant 18 greens in one to two days, or 18 fairways in two to three weeks," Jensen related.

Planting machinery is shipped on another truck separate from the truck which carries the grass stolons.

For planting, Southern Turf

uses a new self-feeding fully automatic machine, which has a hopper capacity of 300 bushels. This size makes refills infrequent. It is self-feeding from a feeding tray and rotating cylinder, scatters sprigs uniformly (eliminating broadcasting by hand), and leaves a smooth surface with track marks only at turns. It cuts the sprigs into the soil and rolls them down. With this machine an operator can put out 15 acres a day.

The next best machine to this is the "Tifton Turf Planter," which costs about \$450, and is made in Valdosta, Ga. for this sod farmer. A tobacco planter, and other new planting machines are also used.

#### 200 Bushels of Sprigs per Acre

Jensen believes in planting heavily for hybrid bermudas. He uses 200 to 300 bushels of sprigs to the acre. Heavy planting gives a good turf in a shorter time, he finds. The owner of the turf prepares the land before the grass arrives.

Southern Turf Nurseries has a wide variety of implements in addition to the harvesting and planting machines. These include five soil shredders, four sod cutters, one vertical mower, two flail mowers, four rotary mowers, 12 spriggers, one backhoe, four power sprayers, 12 backpack sprayers, four spreader-seeders, 12 tractors, two materials handling machines, 12 utility carts and related vehicles, two combines (to combine centipede seed), and irrigation equipment designed to furnish 2,600 gallons of water per minute. There are also five large trucks and five pickup trucks.

Turf Nurseries "keeps right after" weeds on turf, using about \$200 a month in weedkillers, and \$200 in insecticides. It spends about \$2,000 a month for fertilizers.

#### **How STN Gets Business**

Ray Jensen finds good markets for his turf mostly through appearances at golf conventions, turf conferences, distribution of his newsletters, and by "word of mouth."

"There is no better advertising on earth than satisfied customers," he proclaimed.

Other sources are through articles he writes for technical magazines.

He publishes a quarterly four-

page newsletter called, "Southern Turf Newsletter," which he mails to golf course superintendents, recreation representatives, and others. He has also written a new publication on Tifton Dwarf.

The Newsletter not only keeps turf operators who are customers or prospective customers informed, but it helps to bring in business.

Southern Turf's president believes the turf business is on the uproad. He estimated that there are now about 100 turf grass companies in the nation to supply the demand, which is growing with the trend toward more leisure and more recreation.

He sees this trend in the United States and in foreign countries as well. Japan, as an example, is a country in which golf courses are increasing steadily, and he believes this is true of other countries as well.

## Northeastern Weed Control Conference Observes 20th Anniversary at New York Meeting, Jan. 5-7

In an address titled, "Our Weed Control Conference Over the Last 20 Years," Dr. Charles Hovey, tenth president of the Northeastern Weed Control Conference, will review the achievements of the organization when he addresses the meeting at Hotel Astor in New York City, Jan. 5-7.

While the meeting will spotlight conference accomplishments over the past 20 years, delegates will be treated to dozens of sectional papers reporting on '65 research projects.

In a talk by Dr. W. R. Furtick of Oregon State University, entitled "Two-Season, Two-Hemisphere Weed Research," weed problems on the southern half of the globe will be compared with those in the U.S.A.

Arborist Richard E. Abbot of the Ohio Power Co., will offer his experiences in a talk, "Growth Retardants With Emphasis on Inhibiting Regrowth of Trimmed Trees." For those interested in sales and education a representative from the East-

#### **Ohio Short Course Slated**

Arborists, turf management specialists, landscape contractors, garden center operators, and nurserymen will gather at the Sheraton-Columbus Hotel, Columbus, Ohio, Jan. 24-27, to attend a four-day short course. Sponsor is the Ohio Nurserymen's Assn.

Also scheduled to take place simultaneously is the 59th annual winter meeting of the association. man Kodak Co. will tell how to prepare slides and charts.

Total scope of next month's conference covers horticultural crops, agronomic crops, industrial weed and brush control, public health, aquatics, turfgrass, conservation and forestry; ecology, physiology and soils, and new products from industry.

For more detailed information about this meeting write to Dr. John A. Meade, Secretary-Treasurer, Northeastern Weed Control Conference, Agronomy Department, University of Maryland, College Park, Md. 20742.

### 1200 Expected at Illinois Spray School, Jan. 26-27

Advance information from the College of Agriculture, University of Illinois, Urbana, indicates that an attendance in excess of 1200 persons is anticipated for the 18th Annual Custom Spray Operators' Training School, Jan. 26-27. It will be held in the Illini Building.

According to H. B. "Pete" Petty, program chairman, over 1,000 attended last year's sessions. Program for the up-coming conference promises to be of even greater interest with the most current information based on latest tests, studies and experiments.

Details on the forthcoming school may be obtained by writing to H. B. Petty, Chairman, Custom Spray Operators' Training School, College of Agriculture, University of Illinois, Urbana, Ill.



lowa Nurserymen's Assn. Annual Convention, Hotel Roosevelt, Cedar Rapids, Jan. 7-9.

- National Landscape Nurserymen's Assn. Convention, LaSalle Hotel, Chicago, Ill., Jan. 8-9.
- North Carolina State Annual Pesticide School, North Carolina State University, Raleigh, Jan. 10-11.
- First Annual Pennsylvania Shade Tree Symposium, Nittany Lion Inn, University Park, Jan. 11-13.
- 8th Annual Agricultural Pesticide Conference, Purdue University, Lafayette, Ind., Jan. 17-18.
- Rutgers Lawn and Utility Turf Short Course, College of Agriculture, New Brunswick, N. J., Jan. 17-19.
- Maryland Nurserymen's Assn. Annual Meeting, Washingtonian Country Club, Gaithersburg, Jan. 18-19.
- 18th Annual California Weed Conference, Sainte Claire Hotel, San Jose, Jan. 18-20.
- Southern Weed Conference, Hotel Robert Meyer, Jacksonville, Fla., Jan. 18-20.
- Rutgers Golf and Fine Turf Short Course, College of Agriculture, New Brunswick, N.J. Jan. 20-21.
- Rocky Mountain Turfgross Conference, Colorado State University, Fort Collins, Jan. 26-27.