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by Fred V. Grau

ANSWERS TO TURF QUESTIONS

Glenn Burton: 25 years of service

The Twenty-fifth Annual Southeastern Turfgrass Conference at Tifton, Ga., was held April 12 to 14. It was a milestone for Glenn Burton and myself and for all the others who attended the first affair in 1946. Turf research began at Tifton under the leadership of Dr. Burton, who received moral and financial support from Dr. O.S. Amott, United States Department of Agriculture, and from Dr. Grau, then director, United States Golf Assn. Green Section at Beltsville. There was a great deal more moral suasion than there was financial support, but it got the job done. At no time since then has there ever been available more than \$3,000 to \$5,000 a year, but the improved bermudagrasses that have been developed and released have changed the face of Southern turf.

At the risk of being accused of "looking backward" let's review briefly some significant happenings in 1946, a quarter century ago: turf research started at Tifton; American Society of Agronomy accepts turf; first aerater built and demonstrated; world's first harvest of crownvetch seed; Grau-Noer tour of Texas; James Watson, Texas, goes for his Ph.D. at Penn State under Musser, first doctorate in turf, and Green Section Service subscriptions building fund to train turfgrass students.

Now, let's look at the Tifton pro-

gram and some of its accomplishments: superior bermudagrasses developed, including Tiflawn, Tifine, Tifgreen, Tifway and Tifdwarf; seed production of Centipede grass; nutrient and pH requirements of grasses; tolerance of grasses to pesticides; fungicide and nematocide studies; Emerald zoysia (begun at Beltsville, released at Tifton); shade tolerance, thatch, height of cut, overseeding, root studies, sawdust, trace element needs, golf car wear and many other factors have been studied.

Of great importance are the men who studied with Dr. Burton and who moved on to high positions in the turfgrass profession. They include B.P. Robinson, Jack Heran, Elwyn Deal, Ray Cooper, Clarence Lance, Dan Hall, Palmer Maples and Tom Burton (Glenn's son).

Incomplete, to be sure, but the list of accomplishments is impressive. Dr. Burton has developed a loyal following of turfgrass professional men who appreciate the way that Tifton research has advanced the industry. One is constrained to contemplate what the results might have been had funds been adequate during these 25 years.

I began to write, "Now a word about Dr. Burton..." One doesn't describe Dr. Burton in a word or two. He is Nebraskan born and raised, studied under the late Dr. F.D. Keim as did H.B. Sprague, F.V. Grau, George Beadle, G.O. Mott, R.E. Engel, W. Skrdla and many others. In 1936 he received his Ph.D. under Dr. Sprague at New Jersey, then took the position of research geneticist at the Georgia Coastal Plant Experiment Station at Tifton. He has authored some 360 papers which describe results of his research.

While this distinguished professor was doing all this work on turf, he was also upgrading agriculture in the South. Among his accomplishments in forage breeding are: Coastal, Suwannee, Midland and Coastcross-1, all new bermudas for hay and pasture; Tift and Georgia 337 are new sundangrasses for forage; Merkeron is a forage napiergrass; then there are Pensacola bahia grasses Tifhi-1 and Tifhi-2, pearl mixets Starr, Tiflate and Gahi-1 (the first commercial hybrid).

Dr. Burton was president, American Society of Agronomy in 1962. He has earned many prestigious awards. He has been invited to lec-

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Grau

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ture at dozens of institutions in the United States and Canada. In 1970 he and Mrs. Burton visited Australia where they took scores of fascinating pictures, which were shown to the 200 banquet guests at the Tifton conference in April.

Suffice to say that the world of warm-season turf has advanced immeasurably because of Tifton and Dr. Burton.

Q—We have converted to the triplex system of putting green mowers and we are very pleased. One thing worries us, though, and that is the possibility of losing turf as the result of a blown-out hydraulic line or hose. If this should happen, what might be done to save the turf? (North Carolina)

A—Two excellent remedies were discussed at the Tifton conference: 1) Douse the affected area with a wetting agent and use water copiously to flush the offending oil off the green. 2) Spread topdressing thickly on the oil slick and leave it on for a few hours, then remove it. The oil will be absorbed.

Calcined clay also may be used because it is a good "oil soaker-upper" on garage floors. The detergent flush may be used after most of the spill has been removed by the dry method.

Q—Our company plans to build a golf facility in the Carribean where water is at a premium. In considering the several grasses available for fairways, we have thought that common bermudagrass seed might be suitable. Could we develop quality fairway turf from seed? (Pennsylvania)

A—In the frost-free climate of the Carribean you may expect to develop excellent quality fairway turf from seed. It will require occasional irrigation and generous fertilization during the first two years, especially. Economy of seed may or may not be a factor but the cost of common bermuda turf from seed will be significantly less than vegetatively planting a monoculture of a specific strain or variety. If cost is not a consideration, and if highest quality and uniformity are paramount, then consider vegetating the fairways to a selected variety (Tifway, Ormond or even Tifgreen).

Q—For years we have been overseeding our bermuda putting greens with
(Continued on page 26)

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annual ryegrass and, more recently, with a mixture of grasses, including *Poa trivialis*. What would you think of using one of the new turf-type perennial ryegrasses for overseeding? (Georgia)

A—During the past few years I've not had the opportunity to observe overseedings in the South, but at the Tifton conference, we heard Palmer Maples describe with pictures his experience with Pennfine perennial ryegrass. After the meeting one top-notch superintendent said that he was ready to place his order for Pennfine right then and there for his fall, 1971, overseeding needs. Maples considered the performance from every angle, including side-by-side comparisons with annual rye and with a *Poa trivialis* complex, and Pennfine won "hands down" on every count. He used 40 pounds of seed to 1,000 square feet and admitted that 30 pounds probably would have been ample. The higher cost of Pennfine is no deterrent, according to Maples.

Q—We have many fine young hardwood trees on our golf course which continually are in danger of contracting "mower canker." What are some suggestions? We cannot seem to convince our hot rod drivers to stay away from the trees. (Tennessee)

A—There are several ways to treat the area immediately surrounding the tree trunks. 1) Remove soil to a depth of three to four inches in a circle three-feet in diameter. Line the bottom with plastic and refill with broken stones. 2) Kill all vegetation in a three-foot circle using a weed-killer that will not affect the tree. 3) Plant a ground cover in a three-foot circle to protect the tree trunk. Acceptable ground covers include pachysandra, crownvetch and myrtle. This keeps mowers away and holds moisture. The legume provides nitrogen. □

Note

If you have any questions you would like to ask Dr. Grau, please send your inquiries to Dr. Fred Grau, c/o GOLFDOM Magazine, 235 East 45th Street, New York, N.Y. 10017.



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