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by Fred V. Grau

ANSWERS TO TURF QUESTIONS

Turf in South Africa

Park turf and street turf in Johannesburg and Pretoria mainly is kikuyu-grass. It needs little attention aside from mowing and rarely is watered. Many new lawns are planted to kikuyu. It is vigorous, nearly pest free and weed free. On golf fairways it is excellent when managed, but it gets thick and fluffy when neglected or when cut too high.

Common bermudagrass—called "Kweek"—is widely used for fairway turf. During drought periods it remains green much longer than "improved" strains. Bradley, an improved type, shows nematode damage, except where generously fertilized and watered. Florida C. is a fine-bladed grass that is used on greens, tees and fairways. In the absence of a high maintenance program it falls a bit short. Skaaplaas Fine in my view is the outstanding specialty grass for greens, lawns and other close-cut turf. Another one high on my list is Frankwald Fine which is used on tennis courts.

It was interesting to observe the beginnings of Penncross bent in the Transvaal (elevation over 5,000 feet). First attempts suffered from an on-site mixing of gold-mine sand and sawdust. Mixing and composting of sawdust both were incomplete. Penncross bent will succeed, but all factors must be right, not the least of which is a superintendent who knows bent.

The new course being built by Gary Player and Sid Brews is designed for Penncross greens, and their basics are sound.

Bermuda greens are brown from May to October (winter) and are played on continuously. When bent greens become established, it would seem logical that there will be a general conversion. *Poa annua* is one of the dreaded pests in dormant bermudagrass. In Penncross it would be a minor inconvenience.

A common weed in turf is "young osgrass" or "young oxgrass," so named because it is so tough. It is *Eleusine indica*: goosegrass.

The Merion Kentucky bluegrass that I sent to South Africa 10 years ago is still thriving in partial shade of a plum tree in Johannesburg and also at the Frankwald Research Station. It would seem that cool-season grasses are deserving of further research.

A good rough grass on many courses is *Eragrostis curvula*, weeping lovegrass. It is a drought tolerant bunchgrass that can stand occasional close clipping. It is used widely in the United States on dry sandy sites from Maryland south.

At Reading CC on the No. 9 green a new type of bermudagrass has been observed growing in pure stands in patches several feet square. The grass is very fine without grain and has good color. Suggestions were made for spreading it.

It seems to be universal—operators on fairway mowers tend to travel too fast. The result is a ribbing which detracts from the general appearance.

One outfit near Carletonburg has started an irrigated grass and sod nursery. The principal grass so far is Skaaplaas Fine which is kept free of goosegrass by a crew of 140 native women.

In my view the most serious deterrent to progress in turfgrass research and education in South Africa is official apathy. There is a great need to train young men in technical and practical aspects of turfgrass management. A turfgrass survey would do much to put this phase of agriculture in proper perspective. Official recognition of turf by leading agricultural and horticultural bodies would help to lift it out of the doldrums.

**Chemical substitutes:
in time?**

Q—The proposed restrictions on mercury, cadmium, arsenic and other long-time friends of good turf are
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causing considerable concern. Will we have acceptable substitutes for controlling weeds, diseases and insects? Will they be available in time to avoid wholesale destruction of turf? Where do we look for relief? (Illinois)

A—First, keep in close touch with your county agent and your turfgrass specialist from the state university. It is their business to keep in close touch with such developments as these. They may not know all the answers, but they know where to get them. I am confident that our chemical industries will find acceptable, efficient, bio-degradable materials that will not add to environmental pollution.

Q—We have Seaside greens and we are not completely happy with them. Can we reseed them with Certified Penncross and expect good results? (Arizona)

A—Yes, I've recommended this procedure many times and shall continue to do so. Be sure that the green is thatched and well spiked so that the seed comes in contact with the soil. One-half pound of seed per thousand usually is considered sufficient.

For farms, not golf courses

Q—An official at our club engaged a private independent soil testing laboratory to sample and test the soils on our new course. We are quite unfamiliar with their figures and their terminology. They reported the quantity of nitrogen in the soil and used that to calculate the N needed to establish the turf. We think that their recommendations are too low. We enclose a copy of the test results. May we have your comments? (Virginia)

A—Nor am I familiar with their method of reporting. It seems that they are farm-oriented because their explanations revolve around manure, legumes-plowed-down and crop residue. I must agree that the nitrogen recommendations for establishment are too low. Ureaform was recommended but the quantity was too small to be significant.

My suggestion is to contact your state extension turf specialist who can assist in management problems during maintenance. Close correlation between establishment and maintenance is basic to success.

Q—Some heated discussions arise around here concerning artificial turf. You have been in this turf business a

long time. How do you feel about it compared to natural turf? (Ohio)

A—My experience has taught me many things. Among them are: 1) There are some areas devoted to intensive use where natural turf will never make the grade. These include practice and teaching tees where space is limited; athletic fields where practice and play must take place, including band practice; and play areas, such as covered domes, where light intensity is too low to support growth. 2) Many intensive use areas are built so that natural turf has two strikes against it from the start. 3) With few exceptions, important turfgrass areas are not intelligently managed.

Serious sober consideration of these factors (and others) can lead only to the conclusion that artificial turf will be used in those intensive use areas where natural turf fails for one reason or another. In discussing this subject with Dr. Joseph Duich, he asked, "Have you ever calculated what it costs to dry-clean football uniforms when all they have to practice and play on is mud?" Apparently the money spent for dry cleaning would make a handsome down payment on artificial turf.

Make no mistake, I am utterly devoted to natural grass turf, but I know when to be realistic. Also, some of the artificial turf I've examined is for the birds. The manufacturers still have some homework to do.

Q—We have a putting green that is close to the pro shop. Naturally it gets more than its share of traffic. When it was built it got the short end of soil amendments and, of course, it gets very hard. Drainage is all to the center and front. In addition it is surrounded on three sides by large trees (mostly oak). What management aides can you suggest? (Maryland)

A—Fortunately I know better than to suggest tree removal and rebuilding (the obvious) because that program would not be tolerated. 1) Hand water only, never use set sprinklers. 2) Keep soil open by punching or aerating as often as needed. Work in sand and calcined clay. 3) Cut tree roots with trencher or root cutter. 4) Fertilize lightly with gentle slow-release materials. 5) Overseed as needed with Penncross bent. 6) Use hydrated lime at one-half pound to 1,000 square feet as needed to reduce alfae. 7) Keep potash up to stiffen grass and to minimize disease and 8) Skip a mowing now and then. □

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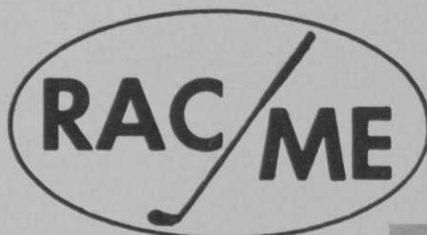
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