
Turfgrass Questions Answered by Grau

If you've got a question you want Dr. Fred V. Grau to help you answer in this department, please address it to Grau Q&A, Golfdom, 407 S. Dearborn, Chicago 5, Ill.

Business management represents a great opportunity for improvement and development in the supt's profession. Technical advancements have reached the point where the growing of grass can be accomplished with greater ease and less effort than at any time in turfgrass history. Better grasses, modern machinery, improved technics, effective chemicals and long-lasting fertilizers mean that the supt. can produce championship turf for everyday play with greater ease and assurance than ever before although still at the mercy of nature.

The Case for Business Management

The "greenkeeper" of yesteryear becomes today's supt. by learning and applying modern technics of business management. This means, first of all, organizing activities on the golf course in a business like manner. This includes an inventory of all physical assets, soil tests of every area, plans for alterations and improvement, replacement of needed equipment and periodic progress reports according to plan.

It is not my intention to attempt to explain how one can achieve proficiency in business management. This subject will be given consideration at the GCSA of America conference at Louisville, Ky., next February.

During a recent visit to Chicago we saw evidence of successful business management by supts. Examples of efficient planning and programming may be found in the well kept, attractive supt's offices at several courses. We visited only a few, so we can cite only a few.

There are many good business executives among supts. Those whom we mention here are representative of supts. of the future who are here today. No slight is intended to those who are not named.

Bob Williams, Beverly CC supt, showed us plans and records that tell why he has

gained such high ranking in his profession and in his club. He has earned and has been given added responsibilities involving maintenance of all physical facilities at the club. The net result has been regular salary increases, complete freedom to develop his program and full cooperation of all club employees. In addition to growing grass, he must understand plumbing, refrigeration, heating, painting, repairs, etc. In a large measure Bob has become "Supt. of Buildings and Grounds".

He is not the only one in the Chicago District to achieve this position. Ray Gerber at Glen Oaks, Gordon Brinkworth at Olympia Fields, Don Strand at Westmoreland — and we could name many others — also have raised the standards of the profession, with profit to themselves, by applying principles of business management.

In our capacity as an agronomic adviser, we are often called to a club where money is no object, where they want only the best and they can afford to pay for it. At other clubs there is a tight budget and every move must count. Recommendations must recognize existing conditions. The greater the budget limitations, the greater the necessity for sound business management. The sooner supts. develop this phase of their activities to the utmost, the sooner their profession will be recognized and given just compensation.

Q. We would like to have you help in selecting the most adequate grass or bent for our new fairways. Soil is ideal but after winter rains it gets a bit clayish and dries up quickly. Fairways have been irrigated and allowed to grow natural grasses, some with local river bent. Fairways are thin and poor. Irrigation expenses have to be kept low in summer when course is generally used. So far we have kept Bermudas out, but upon hearing that there are improved strains with fine leaves and better color in winter, we may want to try some, perhaps with dwarf clover. Would a soil analysis help? (Chile, S. A.)

A. Yes, a soil analysis will help. You may

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send a report at your earliest opportunity.

It is my opinion that you would do well to give some of the fine Bermuda grass strains a chance to see what they would do. Your climate and your soil seem ideally suited to Bermuda. Select those types which in themselves provide excellent putting surfaces. They would be least likely to invade greens and give you trouble.

I would be loathe to advise bentgrass because of its rather difficult maintenance requirements. In a series of tests, however, there are a few bents that have a chance of giving good results. These include Arlington (C-1), Dahlgren (C-115), and an unknown of which there is only a little material. Arrangements to ship small quantities of experimental materials can be made through the U.S. Dept.

More on Poa Annua

Dear Dr. Grau:

In June GOLFDOM I saw where you had several questions on poa annua, and I thought you might be interested in knowing how I controlled it in my winter rye greens.

About the second week in March when I first noticed it coming in, I sprayed my greens with an application of PMAS (1 oz. 1000 sq. ft.) and another application of PMAS same strength in 7 days. Then in 3 days I sprayed with an application of 24-D fungicide (3½ oz. per 50 gal. of water to each green).

This spraying completely eliminated poa annua from my rye greens and, as yet, I have none in my Bermuda greens. Maybe this might help some of the southern courses keep poa annua out of their greens.

Hal Jernigan
Beechwood CC, Ahsokie, N. C.

of Agriculture. This I shall be glad to arrange for you.

Among the Bermudas that you should try are Tiffine, Uganda and Gene Tift. Should one or more of these strains appeal to you it will be possible to arrange air shipment of commercial quantities.

Bents and Bermudas tend to form thatch and mat which become objectionable for play and for maintenance. Both can be overcome mechanically so that this need not worry you.

Bermuda will give you maximum satisfaction during summer when you have most of your play. Bermuda will be far more economical on irrigation expenses although part of the saving will be spent on fertilizer — a good investment.

Q. I plan on putting in a new green, and would like to try some Polly Cross if I can locate seed. Have been referred to you for information. (Kans.)

A. "Polly Cross" now is known officially as Penncross creeping bent seed. There should be a supply of seed soon for fall planting.

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Q. I have been assigned to the job of the upkeep of the course at a U. S. Naval Base. This is a new kind of job for me. I would appreciate any kind of help you can give.

From all the complaints I have heard, and from what I can see, the big problem is the greens. The grass is green in spots only, and the greens aren't smooth. In the past they've been using potash and sand mixed for dressing the greens. Is this proper? What kind of grass seed do you recommend for this climate (90° temperature every day)? For what reason do you use an aerifier? How often should you water the greens and what time of the day?

How close should the greens mower be set to cut? As you see, I don't know anything about a golf course and I imagine I'll have a rough time learning the tricks of the trade. (Navy No. XXX)

A. A program of topdressing would seem to be in order to smooth the greens for better putting. A sandy soil usually is best, preferably rendered weed-free by sterilization with chemicals or gas.

Grass green only in spots would indicate hard soil and excessive run-off with water collecting in the low places. The answer is aeration to obtain moisture control — get the water into the soil where it falls — apply

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water slowly so that the soil absorbs it as fast as it is applied.

Chances are the principal fertilizer requirement is nitrogen to stimulate growth and color. It would be well to have soil tests made at your nearest soil testing laboratory.

A vigorous fine-bladed vegetative Bermuda should be your putting green grass. Seed is not likely to give you the results you are looking for.

Aerating equipment is used to get water, air and fertilizer into the soil to get more effective use of water and fertilization and to promote deep rooting.

Watering should be done as needed with emphasis on deep soaking at long intervals with hand watering in between to maintain growth and color. Well-fertilized grass needs less water than hungry grass. It is a mistake continually to use water as a "soil-softening tool." Best time to water is early morning to wash the dew off the blades. This reduces disease and the grass dries faster, enabling the mowers, and play to start sooner.

The best height of cut for a greens mower is in a range between 3/16 and 1/4 in. If set higher than 1/4 the grass tends to get matted and produces a poor putting surface.

Q. I am writing you in regard to yellowish green looking spots on my greens. I have tried different kinds of fertilizer but they don't help much. These are spots about 12 or 18 ins. across scattered over the green. I had trouble

with them last year for the first time. All come about this time of year. I think aerifying might help. What do you think?—(Kans.)

A. We have racked our brains for an answer to your problem of yellowish-green spots on your greens but draw a blank. From the limited description, we fail to recall anything in our experience that matches this.

Our first thought is that the spots may be a particular strain or type of grass. This is a wild guess, not knowing the kind of grass on the greens. It is possible that it may be nematodes. Without a description of the kind of trouble it is very difficult to diagnose, especially 1300 miles away.

We urge you to take your problem to Dr. Ray Keen at the Agricultural College at Manhattan, Kans. This requires on-the-spot inspection and diagnosis.

Q. Our grass greens suffer severely from "winterkill" and smothering from ice and snow which covers them all winter. Would it help if the greens were to be covered in fall with light tree branches, with straw thrown over the branches? (S. D.)

A. First, let us analyze the problem. "Winterkill" might be desiccation (drying out) in early spring when the ice and snow are gone. Dry winds can remove moisture from the blades of grass while the soil still is frozen and the roots thus don't get enough moisture.

"Winterkill" could be severe snowmold at-

tacks which would be active most of the winter but the effects would show only after the snow and ice left.

The effect of dessication could be lessened by using tree branches to hold a snow cover until late spring when the soil would be thawed so that roots could absorb moisture.

Snowmold can be reduced by using a resistant grass (Congressional bent) and by making fall applications of specific fungicides, according to manufacturers' recommendations.

I favor the tree branch cover if a mercury treatment is to be made in advance.

Q. We are planning to start several experimental plots of bent grasses with the idea of eventually using the most satisfactory strain on our own courses. We would like your recommendation as to the most satisfactory strain or strains to use in this locality. Washington bent has been highly recommended to us.

We have a small plot of bent grass on one of our golf courses. No one seems to know where it came from but it is apparently doing very nicely. Is there anyone that we could send some sample plugs to and have it identified? (N. C.)

A. You are wise to start a test nursery so that your eventual choice of a grass will be the one which performs best under your conditions.

Washington bent has been a good one. The only trouble is that there is more than one "Washington" and some are better than others. Their identity has been clouded over the years.

Cohansey (C-7) creeping bent is giving a good account of itself where summer heat is hard on other bents. Arlington (C-1) and Congressional (C-19) mixed together are doing very well near you. Arlington alone is very good on many courses. Right now, that just about exhausts my choices. You could add Pennlu to your nursery because it needs to be tested in the south. When Penncross seed is available (this fall, we hope) you certainly should have a plot of that.

Perhaps you would like to establish a few test plots of fine-bladed Bermuda grasses. With poa annua as a naturally occurring cool season grass, you might be pleased with the performance of Bermuda. I would suggest trying three to start with: Gene Tift, Tifgreen and Ugandagrass.

When you find patch of a grass that is outstanding by all means preserve it and send a specimen (a 4-in. plug, soil shaken out, dried almost to wilting, wrapped in polyethylene and mailed parcel post special delivery) to someone who can evaluate it.

I would be glad to plant it in my nursery where I am observing several interesting grasses and I would identify it for you if I am able. If it shows promise it can be increased and sent to experiment stations for further testing.

Q. We are building a new 18-hole course at Vineland, N. J., greens to be planted in C7. I am interested in finding out more about this grass. Do you have any information about it? (N. J.)

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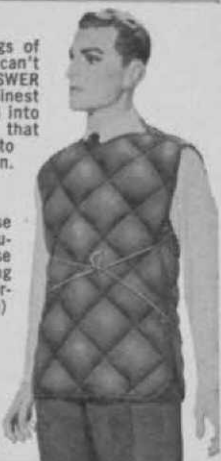


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A. Cohansey (C-7) creeping bent was selected by E. R. Steiniger at Pine Valley, N. J. It is an excellent hot-weather grass which holds good color early and late as well. It has a light yellow-green color which is very pleasing when a green is planted solid to this grass. By contrast with a dark green bent, often it is unfairly graded down by those who have a personal preference for dark green.

It is somewhat susceptible to dollarspot which is easily to control with nitrogen feeding and suitable fungicides. It is quite resistant to brownpatch. It is vigorous, aggressive grass and resists the invasion of poa annua very well. develop a sense of when to use it.

Q. I have just purchased an aerifier with the idea of using it not only on my private lawn, but on our course as well. I have been chairman of our green committee for many years. How often should we aerify each of the following:

Lawn — centipede, zoysia and Bermuda;
fairways — centipede and Bermuda; tees — Bermuda; greens — Bermuda (summer) and rye (winter)?

Our soil is a sandy loam with very little organic matter in it. It is not a good soil. We do not add much fertilizer to our fairways. We do use quite a lot of fertilizer on lawn, tees and greens. (Ala.)

A. The "pat" answer to "how often should we aerify?" is "as often as necessary". Now, all I have to do is tell you when it is necessary.

You can aerify to advantage just before you fertilize. This promotes deep penetration of materials. When water begins to run off instead of soaking in, it is time to aerify. This is good procedure in connection with seeding. In general, Bermuda can use more aerifying than centipede and zoysia.

Aerifying promotes the free circulation of air (oxygen) in the soil, enhancing value and efficiency of fertilizers. Some courses aerify Bermuda fairways once a month.

Aerifying helps to topdress turf and create a firm resilience. Fairways that get hard in summer can be softened mechanically by regular aerifying, starting when there is natural moisture in the soil which improves deep penetration. Golfers claim that aerified fairways are easier to walk on.

The need for aerifying greens will depend upon the kind of soil, how badly they need cultivation and other factors. I am a firm advocate of four-way aerifying, doing a good job while you are at it, then leaving the greens to the golfers until needed again. Twice or three times a year for four-way aerifying should be sufficient in most cases. Tees will need cultivation more often than fairways—about once a month.

Your sandy loam soil can develop a crusted condition which can shed rain like a roof. When that happens you can be sure that it is time to aerify again. As you operate the machine and observe the results you will soon develop a sense of when to use it.