# **Grau's** Answers to Turf Questions



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

#### Lawn Clinics

A statement made by Edwards comes to mind: "If you would know anything thoroughly teach it to others."

Another statement made by Dunlap also comes to mind: "If you have a dollar to spend on your lawn spend 90 cents on fertilizer and 10 cents on seed."

At first glance the two statements appear unrelated. But when applied to the subject of lawn clinics they are quite closely related.

It has been our pleasure to have participated in many lawn clinics held in different parts of the country. Most of them have had technical information supplied by local supts. In every instance interest has run high. The information developed has fed garden columns for months. For the first time, many homeowners have had an opportunity to obtain authentic information on lawn-making and to ask questions.

Requests from garden clubs for speakers on "Lawns" have reached great proportions. Many clubs have not been able to secure the speakers they have wanted. How much better it would be if all lawn interests pooled resources once a year and held a real bang-up lawn clinic.

A committee composed of representatives from the press, agricultural extension service, radio, garden editors, garden clubs and course supts.' associations would be responsible for planning the affair. A large auditorium with good acoustics and projection equipment is essential. Displays of sods of adapted grasses could be an integral part of the show. A well-developed plan of procedure with good speakers would help to assure success.

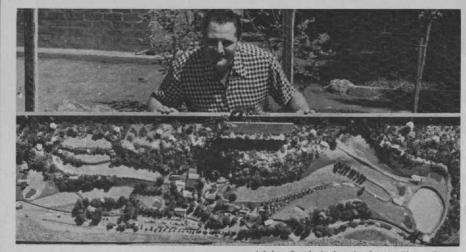
Basic facts supported by evidence could be the keynote of the clinic. It would be to the everlasting credit of the organizers to dispel the confusion which surrounds many advertising claims and to cut through the mists of doubt with clear-cut statements.

O. In Missouri we have two serious greens problems. Each year, around July 1 we have an invasion of crabgrass which, with high temperatures and humidity, just about ruins our greens. We have tried, for a number of years, picking the greens, but this has been unsatisfactory. Is there any chemical that we could safely use which would kill or control crabgrass? We have two kinds - one is the silver crab and the other we call ordinary crab or water grass. Our greens have been good early in the season, but trouble starts coming with hot, humid weather and this crabgrass invasion. Is there a grass that you could recommend for this climate that could better stand the heat and humidity than the Seaside bent we have been using? (Missouri)

A. In answering your second question first, we can say quite definitely that there are better bents that Seaside for greens in your part of the country. One that has been quite outstanding has been Cohansey (C-7) bent. This grass is stolonized and it has a good record for resistance to heat. It is rather light yellow-green in color and you can see excellent greens of it at the Tulsa CC. There are several instances in the St. Louis area where Cohansey bent has done an outstanding job. Two inch plugs of Cohansey bent sod introduced into Seaside greens can, in a few years, take over the Seaside greens without taking them out of play. I have several pictures of things that you describe, the grass going out during heat and humidity, where Seaside was completely ruined, but where plugs of Cohansey introduced the year earlier, stood up and were healthy in spite of all heat and humidity.

Your questions prompt me to ask a few of my own, and one is concerning your water management. Judicious use of water during these periods can have a great deal to do with the success or failure of grass. Just planting an improved grass in no way guarantees that you will have good greens. Management is the key to success with any grass.

Di-sodium methyl arsanate is a chemical that has been used quite satisfactorily on putting greens to control common crabgrass. In itself it is not sufficient for the silver crab, or so called goosegrass or crowfoot. In this case, a little



2,4-D or Brush Killer 2,4-D and 2,45-T should be added to the di-sodium to effect a kill on the silver crab. If, however, the grass is already in a weakened condition, this treatment easily should get rid of the bent as well as the crabgrass. In contemplating a chemical treatment on the greens, every step first should be taken to strengthen the grass so that it can withstand the shock.

Another factor is topdressing. If you are using unsterilized topdressing, it may be that you are planting the crabgrass into your greens.

One of the good tried and true methods of reducing injury during these hot, humid periods is light dusting with hydrated lime. This seems to have a very good effect on the grass, reducing diseases and strengthening it against heat and humidity. About two lbs. of hydrated lime dusted on dry to 1,000 sq. ft. seems to do the trick.

If the soil drainage is poor, if there is compaction, if you have very shallow root systems and if you are not following a good fertilizer practice, practically everything that I have told you can be thrown out the window. First, you must make the conditions right for the successful growing of the grass. Then you can begin to expect better results.

Q. We greatly appreciate your answer concerning control of crabgrass and a grass better adapted to our hot, humid summers. We are interested in learning more about the Cohansey (C-7) bent, including the proper time to plant, the best way to plant and some idea as to cost.

I feel that you hit the nail on the head in suggesting we may be planting crabgrass with our topdressing. I have been trying for years to get this fact across to our green chairman, but with only little success. With your letter to back me up, I believe we can now correct this fault. For the past two years we have watered by hand only when the temperature is 90 or above. We hand water in the morning Adobe Creek Lodge in Santa Clara County (Calif.) has been converted to a 9-hole course, a three-dimensional model of which is shown. Formerly a picnic area, the course was constructed under the supervision of Frank Martinelli, Jr. (above), who headed a group that purchased the property. An artificial lake (extreme right) is being hollowed out by the new owners.

and during the heat of the day we go back and hand water just enough to cool down the grass and the surface of the soil. When the temperature is below 90, we usually water in the early morning for about an hour. There are several members who insist that we should really soak the greens during this hot weather, but I have agreed with our supt. that to do so would be to invite more trouble. Are we right in this, or should we keep them soggy? We do have some trouble wth compaction which we reduced greatly by aeration. We open the greens as often as they seem to need it. In this manner we have been able to keep our bentgrass growing much better during hot weather.

We are forced to use city water. It is deep well water and very hard, containing lime and other minerals as well as chemicals used for purification. In your opinion is it likely that this kind of water could have an important bearing on our problem?

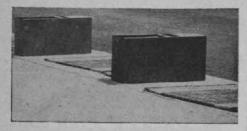
When we begin to prepare our topdressing, what method do your recommend for the sterilization? (Missouri)

A. The best time to plant any creeping bent in your area is in the early fall. The only way in which Cohansey can be planted is by stolons. These are scattered, usually at the rate of five, seven and sometimes ten bushels to 1,000 sq. ft., rolled, lightly topdressed, rolled again and kept moist until they have caught. I cannot give you

(Continued on page 102)

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### Grau's Answers

(Continued from page 76)

exact prices as to the cost of stolons, but they range somewhere between \$3.50 to \$5.00 a bushel — sometimes a little more. When this cost begins to sound a bit high, clubs consider using Penncross bent seed, using it at the rate of one lb. to 1,000 sq. ft. The price of this has dropped recently and is a good buy. It will develop putting greens that become well adapted wherever they may be planted.

I would hesitate to suggest any change in your watering program. The one-hour soaking in the morning actually may be just a little bit more than needed. You may tell your members, who insist on soaking the greens during hot weather, that they had better let the supt. and you run the course, because you have proved that your method is successful. By keeping the greens soggy during hot weather, you can be sure you are going to lose grass.

I would not consider that hard well water would have any important bearing on your problem. Bentgrass can grow over a wide range of acidity and alkalinity and thrive at almost any range if it has sufficient nutrients and plenty of oxygen in the soil.

There are two good ways to sterilize your topdressing. One of the cost convenient is to use cyanamid at the rate of 13 lbs. to a cu. yd., incorporating it and mixing it well with the topdressing, letting it stand 3 or 4 months before using to allow the cyanamid to kill weedseeds. The other way is to enclose the topdressing in a gas-tight frame and treat it with methyl bromide gas under a cover, according to directions, which is much more rapid than the cyanamid treatment, but somewhat more labor. The topdressing following the methyl bromide treatment can be used in only a few days.

Q. Do you know of any courses in the U. S. that have sodded their green rather than using sprigs or stolons? If so, did the sod greens make a good putting surface quicker than where stolons were used?

A. Many courses regularly sod their greens, particularly when they are changing from an unsatisfactory grass to a new grass. In this way, they are able to get the greens into play more quickly than if they were using sprigs or stolons. About the quickest way you could possibly get a green in play from sprigs or stolens is 8 weeks. You can have a green in play from solid sodding in about a week. The reason for this is that you are developing the solid sod in a nursery where there is no play and no interference with maintenance. Then, when the sod is mature and ready to be moved, it can be put in place on a firm, well-prepared, well-fertilized seedbed and, with proper rolling, topdressing and other maintenance practices, the green becomes playable in about a week.

The sodding method is preferred particularly where the course is continued in play and where it is desired to have greens out of play for as short a time as possible. If the course is out of play for two or three months there would be little advantage in sodding over sprigging or stolonizing.

Q. Please advise how to kill or remove chickweed in our greens. (Mich.)

A. Arsenate of lead probably is your safest material for eliminating chickweed from your greens. During hot weather apply no more than 5 lbs to 1,000 sq. ft. The chickweed will be hit harder if the plants are damp so that the arsenate powder will cling to the leaves.

In the fall, when cool weather starts, you can apply safely 10 lbs. to 1,000 sq. ft. mixed with a little topdressing to act as a carrier. If some patches are particularly stubborn, rub some lead arsenate directly into the weed. Wear a rubber glove when doing this.

Do not expect the chickweed to go out overnight. It will be a slow, gradual process. Yearly applications should be made until it disappears.

Q. I am building greens at X X X Club in Virginia. I would like to know more about the new grasses being developed for the South. I am familiar with the bent now growing at Winston Salem. I would like more information on bents. Some bents seem to stand up better that others. I wonder if you know which is the better. I am putting in some Tifgreen. I would like to know if there is any special



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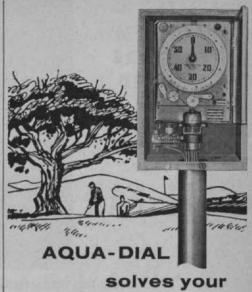
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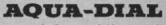


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treatment for this grass. I am familiar with No. 127 but is seems that it is too matty and tough. I would like to know more about Uganda. I read that it has been approved and also Genetift. I find that Genetift comes in very slowly and other Bermudas crowd it out. This seems to be a poor section for greens because of the change from winter to summer grasses. I would like to know; if No. 328 is better than Uganda, or what do you think? Also, do you think someone will ever come up with a grass that will stay green the year round in our section? The bent at Winston-Salem does. (N. C.)

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A. The C-1, C-19 combination being grown at Winston-Salem is the same as that being grown by Charlie Danner at Richland in Nashville. These greens are highly successful because they are being managed properly under expert supervision. The same greens could go bad in two weeks if not properly handled.

Cohansey C-7 bent is becoming popular as one goes south because it is extremely heat tolerant. It is a yellowish green compared to the darker green of C-1 and C- 19 but entire greens of Cohansey bent are striking in their perfection when they are properly handled. You will find some of the finest greens in the country at Tulsa under the supervision of Alex Repin. This is indeed a hot part of the country for bent greens. In St. Louis, Cohansey bent crowds out almost all other bents because

it seems to be more aggressive and tolerates the extremely bad conditions there better than other bents. I would strongly suggest that you give this every consideration.

Tifgreen requires special treatment much as any other good putting green Bermuda would require. This includes careful irrigation, adequate fertilization and combing, brushing, matting and vertical moving, as required to maintain a good tight, dense smooth putting surface. Apparently others have found, as you have, that No. 127 becomes rough and is virtually impossible to maintain as a finished putting surface.

Ugandagrass is finding favor for putting greens in Washington,, D. C., Norfolk, and other areas in southern Virginia as well as in Arizona and California. It also is being used on tees, grass tennis courts and for many other uses. It is being compared with Tifgreen in many areas and the results of these tests largely will determine which is the better under each particular set of circumstances. Uganda seems to be somewhat finer in texture than the Tifgreen and is softer. It requires much the same treatment that the Tifgreen demands and which one will best be suited to any particular type of management is a bit difficult to say at present.

Genetift is eminently satisfactory in many areas, particularly around Houston. Your comments on it are interesting but your findings will not be shared by everyone.