
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.

Take Another Look at Zoysia for Tees and Fairways

Most of the questions that come into GOLFDOM's Q&A dept. imply that greens present more of a problem than any other turf on the course. It is undoubtedly true that problems with greens are more critical and more in need of immediate specialized attention than anything else. "If you don't have greens, you don't have a golf course," is the way it should be expressed.

We have no quarrel with the importance of greens. And please, Mr. Architect, when new courses are planned and built, won't you insist on perfect drainage and a porous sandy soil to permit easier maintenance and better playing conditions? It isn't any fun to live with a sick green and to listen to the gripes about bum turf — and then be obliged to rebuild and install drainage that should have been there in the first place. Why is it that there isn't enough money to install tile drains during construction, but there always seems to be enough to rebuild later on?

How About Tees, Fairways?

Now for tees and fairways which seem to be generally bypassed, but which deserve their share of the attention. Committees begin to sit up and take notice when goosegrass, knotweed, clover and crabgrass take over. We shall not solve all tee and fairway problems in this short editorial but a few basic principles are outlined for guidance.

1. Water and Choice of Grass: The total

water situation has become so critical that, in planting new courses or in planning conversion of old ones, serious consideration should be given to those grasses and to practices which provide good turf with little or no artificial irrigation. This would place Berumdas and zoysias in top position among the warm-season grasses. They deserve attention as far north as they can be grown. Bluegrass and fescues top the list beyond the zoysia line. Bentgrass seems to be waning in popularity because of its high maintenance requirements — especially where water is concerned — and its summer weaknesses.

2. Fertilizer: Science has shown that well-fed plants can use water far more efficiently than hungry ones. In turf, nitrogen is the key element, balanced with P and K, and other nutrients as needed. Everyone knows that well-fed turf is its own best weed control. Wise choice of the grass is basic to effective utilization of fertilizer. Weak, poorly-adapted grasses can't make best use of plant food. Weeds usually take over.

Plant Food Essential

A club that has limited funds should spend no time arguing about whether to fertilize or to install a water system. First, supply plant food in adequate quantities. In many cases, supplemental irrigation will not be needed. Convert to the most drought tolerant grass if this has not been done. Then, if water runs short, or if there is a drought, there still will be turf to play on. Color does not necessarily affect a golf shot but quality of turf is a big factor. Many clubs have converted tees and fairways to Bermuda when bluegrass and bent have failed. Recently there has been a new interest in zoysia on both tees and fairways. There have been some disappointments with both Bermuda and zoysia, mostly because of faulty maintenance. Too much water has hurt both grasses; failure to mow closely enough has developed unplayable thatch and mat; too little nitrogen has caused Bermuda to go backwards.

Zoysia pushes forward even under low levels of nitrogen feeding. Zoysia has been found doing well much farther north than Bermudas. Apparently we need to take another good long hard look at Zoysia which maintains near-perfection with minimum maintenance. Above all, give attention to it because it can take punishment and recover well, and because it can be mowed closely and frequently without damage.

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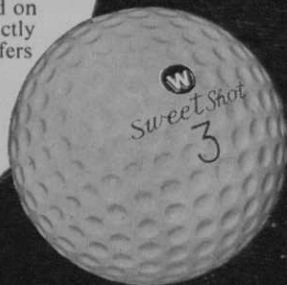
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Grau's Answers (continued)

Storing Topsoil

Q. A club where a friend of mine is one of the directors has a good supply of topsoil for use now and then when required. The problem is how to properly store the topsoil so it will keep its character and not deteriorate from rain or moisture, sun, dust or other elements. It has been suggested that it can be stored under polyethylene sheeting or, possibly, rubber-coated sheeting. What do you recommend? (Rhode Island)

A. The best way to store the topsoil is to leave it out doors in the wind, rain and sun, covered with live growing vegetation. Pile it as you wish, then follow the pattern established by the Pennsylvania Highway dept. Apply lime, if needed, then fertilize with 5-10-10 at 1,000 lbs. to the acre (25 pounds to 1,000 sq. ft.) Sow a mixture of 40 lbs. of ryegrass and 40 lbs. of inoculated Penngift crown vetch seed to the acre.

Cover with a light straw mulch, one ton to the acre, and go away and let Nature take care of it. No mowing will be required. If a few large weeds grow up, cut them off with a sickle. The crown vetch will take over the weeds and will keep the topsoil in a loamy, crumbly condition, ready for instant use.

The piles of topsoil could be covered with

poly sheeting but there would seem to be no advantage except that the soil would be dry whenever needed. The vegetative covering offers the greatest advantage.

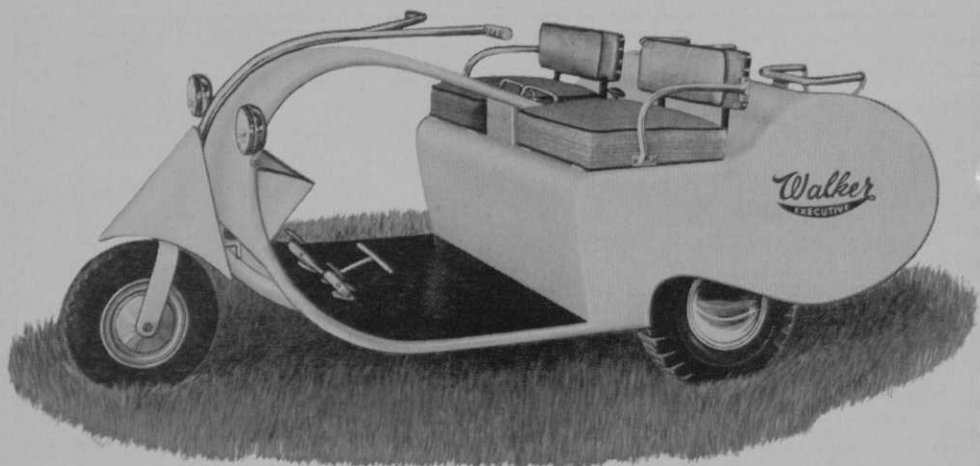
Grass Requiring Less Care

Q. I have maintained about 14,000 sq. ft. of Washington bent for the past 20 years or so. It requires close attention and prevents me from making summer trips of very long duration. I have decided to go into some other lawn grass that would be beautiful and, at the same time, would not require as much attention and give me as much grief as the bent. In making this change I'd like to know what kind of grass to plant. We live in south-central Minn. and have good sandy loam with clay sub-soil. I presume it would be well to make the change in Sept. and remove all the bent sod. About how deep would you suggest we cut the sod? (Minnesota)

A. I can think of no combination that would be more suited to your conditions and to your climate than a mixture of Pennlawn creeping red fescue (70 per cent), Merion blue (30 per cent). This mixture should be seeded at the rate of 2 to 2½ lbs. to 1,000 sq. ft.

Yes, the bent sod should be stripped and removed. I would suggest cutting it about one inch thick. If the grade of the lawn is exactly the way you want it, I doubt if I would do any seedbed preparation beyond going over it

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6 or 8 times with an aerating machine to cultivate the soil and to punch it full of millions of holes. During this process incorporate whatever lime, phosphate and potash may be required according to the soil test. The soil test can be made in advance of stripping so that you can have all materials available when aerating is started. The various passes of the aerating machine will help work the materials into the seed-bed.

As a last item before sowing the seed, I would spread 20 lbs. to 1,000 sq. ft. of nitrogen fertilizer. This will provide adequate nitrogen for rapid establishment of the fescue and Merion and feed the turf for an entire season.

I would start immediately. Mid-August would have been even better. Merion needs warm soil to germinate quickly and to establish turf before cool weather sets in. Pennlawn fescue thrives under almost identically the same conditions.

You may expect to find some of the Washington bent coming back into the lawn. That which reappears can be discouraged by treating the patches with 2,4D. Bent is very sensitive to 2,4D and can be killed while fescue and Merion will not be injured. The height of cut should be about 1 in., no higher.

These grasses will require infinitely less maintenance than bent and probably need to be irrigated only two or three times in a season. One fertilization a year with a controlled release is all that you will need.

It is recommended that the clippings be re-

moved, especially when they are heavy enough to lie on top of the turf and become unsightly and a harbor for insects and diseases.

A Pair of Pests

Q. I have some patches of clover and also some patches of silver crabgrass on the fringe area of my greens. I would like to kill this grass. What do you think would be the best material to use. I want to replant these areas in bentgrass. (Kansas).

A. Clover largely can be eliminated through the use of nitrogen fertilizer. Nitrogen feeding on a good grass can choke out clover without the need for chemicals if soil conditions are good and management practices are favorable. Overwatering and starvation are sure ways to bring in clover and other unwanted growth.

In replanting these areas in bentgrass I suggest that you consider using Penncross creeping bentgrass seed. Penncross has been proved to be a highly desirable grass for putting greens with great vigor and sturdiness and ability to keep out unwanted growth. Be sure to fertilize generously in the seedbed before sowing the Penncross seed. One lb. of seed to 1,000 sq. ft. ordinarily is sufficient to produce an excellent stand of turf. Superior grasses adequately fertilized and intelligently managed are your first defense against weeds.

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