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.

Calculating Costs

At the 29th turfgrass conference in Washington, D.C., the theme was developed that it is just as important for a supt. to know costs of maintenance as it is for a manufacturer to know costs of production. It becomes doubly important when a committee grants and approves a budget of $40,000 and then asks for a program that could not possibly be accomplished for less than $70,000.

There are cases in which attempts have been made to save money on the course to cover clubhouse expenditures by asking the supt. to have the greens mowed only twice a week. The cost of renovating to get the greens back in playable condition after a few weeks of that kind of maintenance would be several times the cost of daily mowing to keep them in shape.

The high cost of labor was brought out by more than one speaker. One said, “65 to 75 per cent of the budget.” Another said, “70 to 80 per cent.” Regardless of which is more nearly correct, the fact remains that labor costs money. It seems unfortunate that labor costs are not well understood by some committees. Here is a case in point:

A supt. decided to change his fertilizer practice in favor of one that would reduce labor costs by not watering in the fertilizer and by making only three applications a season. He had been using a high-nitrogen soluble which had a low cost per ton—about $8. In order to achieve reasonable steady feeding he had to apply it light every two weeks and water it in to prevent burning. This required the work of six men for two days for 18 greens or 36 labor hours for each application. By making the change to the new material he could cover the greens with two men working one day. In presenting his request to the committee the price of $400 a ton stopped them cold. “We can’t afford it!” was the first reaction.

This is the way in which cost figures were presented to the committee:

<table>
<thead>
<tr>
<th>Soluble program</th>
<th>New program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per ton</td>
<td>$80.00</td>
</tr>
<tr>
<td>Nitrogen content</td>
<td>33%</td>
</tr>
<tr>
<td>Cost per lb. of N (approx.)</td>
<td>13¢</td>
</tr>
<tr>
<td>Annual N requirement</td>
<td>at 8 lbs. of N per 1000 sq. ft.</td>
</tr>
<tr>
<td>Cost per season for fertilizer</td>
<td>$104.00</td>
</tr>
<tr>
<td>Number of applications</td>
<td>16</td>
</tr>
<tr>
<td>Man hours per application</td>
<td>96</td>
</tr>
<tr>
<td>Cost of labor per application @ 1.75 an hour</td>
<td>$168.00</td>
</tr>
<tr>
<td>Cost of labor for season</td>
<td>$2688.00</td>
</tr>
<tr>
<td>Cost of labor and fertilizer</td>
<td>$2792.00</td>
</tr>
<tr>
<td>Savings</td>
<td>$2236.00</td>
</tr>
</tbody>
</table>

These figures will not coincide exactly with any existing figures because of variations in prices, wage rates and methods of application. They are intended to point out the need for having total cost figures to justify a request. They show also that higher unit costs for materials and equipment can be justified when they accomplish more.

(Continued on page 86)

Syringing is a must when grass begins to wilt even if there is ample soil moisture. Fine mist carried by air-solved oxygen to suffocating roots. Half hour during the day often means loss of grass.
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Grau’s Answers
(Continued from page 42),

plish significant savings at the end of the season.

Now — how well do you know your costs?

Snowmold and Clover

Q. We have a 9-hole course opened to the public for the second year. The greens are very good but they seem to have a lot of white clover coming into them. Is there anything on the market to treat these clover spots without killing the seaside bent? Also, is there a weed killer on the market for bent greens? (Mich.)

A. You are likely to be severely affected by snowmold, particularly on seaside greens, because this grass is very susceptible to the disease. It so frequently happens that when seaside is injured by snow mold, or by some other disease, clover seems to be one of the first invaders. Therefore, the appearance of clover is natural but does not make it acceptable. I mention it to emphasize that complete control of snowmold is one of your first steps in preventing clover invasion.

If you will read your back issues of GOLFDOM you will notice various discussions of clover control in bentgrass greens. It is important, first, to have good, strong grass. Through proper management such as aeration, minimum watering, adequate fertilization and disease control, you will be in a position to use most effectively a weed killer for clover. The best I know of is Brush Killer, a mixture of 2,4D and 2,45T. This must be used carefully and at low rates in order to avoid damaging the bent, I would use about 1/4 of the recommended rate on the Brush Killer container. I would try this first on a nursery or practice green so if it does cause damage it will not be serious.

Another way to discourage clover spots is to dust them with calcium arsenate. This material is quite safe on bentgrass although if used in excessive amounts, it can burn the grass. A light dusting on the clover spots could be very effective.

There is no weed killer that I know of that is designated specifically for bentgreens. For the most part, we try to avoid using any kind of weed killers on bentgreens. Sound management practices that produce good turf are the best defense against weeds in greens.

Ugandagrass for Collars

Q. Why wouldn’t Ugandagrass work well on Poa annua collars of bent greens? (Md.)

A. We believe that Ugandagrass may be a good one to plant on the collars of bentgreens where Uganda is adapted. It looks like a very good summer companion to Poa. It grows well in hard soil which we usually find on collars

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<table>
<thead>
<tr>
<th>Width</th>
<th>Trial Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>20&quot;</td>
<td>24&quot; x 60&quot;</td>
</tr>
<tr>
<td>36&quot;</td>
<td>42&quot; x 48&quot;</td>
</tr>
</tbody>
</table>

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and approaches. It may not take water too well so keep it dry as you can. We believe the best way of establishing it will be to lay solid sod from the nursery. It shouldn’t be a pest in the greens because it looks so very much like bent. The ball probably will play well onto and from a Uganda grass collar.

**Permanent Seed**

Q. What is a good, permanent seed that will hold up under drought, etc., for this region? I don’t want any “quickie seed.” (Md.)

A. A seed that will give you a sturdy, drought-resistant turf in the Mid-Atlantic region is Kentucky 31 fescue. This will cover a variety of purposes from lawns on sub-soil to play-grounds, athletic fields, roughs on golf courses, highways, airfields and many other purposes. It is not the kind of seed that you would choose for a small, extra specially good lawn. It is a good rugged, permanent grass that will hold up under drought. It will come in fairly quickly but it is permanent. It will thrive best under a soil that is approximately pH 6.5 to 6.7, adequately supplied with nutrients, especially nitrogen and mowed at a height of about 2 inches. If clippings are not to be removed, mow frequently enough so that the clippings are so short they will disappear into the grass.

**Low Spots in Greens**

Q. We are writing to you concerning the leveling up of low places in our bent greens. Greens are about 4-years old and over this period several low spots have developed in each green. Our greens were constructed by laying down a bed of crushed limestone, approximately 3in- to 4in-size, and covering this with a layer of soil. They are so constructed that they are 12in- to 30in. above fairway level and are well drained.

We have tried to level the low spots by using topdressing but have failed to bring them back to green level. Something probably was not done correctly when constructing the greens which caused the low places. But that is past history and our problem now is how to correct this condition. (Ky.)

A. It would seem that the soil ran into the large limestone rock and left a cavity which then caused a depression. The easiest way to correct the low spots is to remove the sod and fill the depressions, then re-lay the sod. With modern power sod cutters this can be done quickly and neatly. Be sure to probe the depressions deeply and tamp the new soil to insure no further settling.

I suggest using a fill soil just a bit sandier than that now in the green. Mix it with the top

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Q. Our green committee and our supt. appear to have a difference of opinion over the watering of greens. The supt. says the best time to water greens is in the heat of the day. He prefers a hose to sprinklers. He says it is beneficial to cool the greens. His theory is that night watering causes various diseases of the greens. Is our supt. right? Is he wrong? Can we use a combination of the two? (III.)

A. Your superintendent is right and wrong. A combination of methods is a must.

Using a hose and a fine spray during the heat of the day is essential to cool the grass, stop wilt and save the grass. The hotter it is the more necessary this is. This is called "syringing" or "showering off" and is not properly called watering the greens. The best time to water greens, to wet the soil in depth as it is needed, is in early morning. This washes in the dew and guttated water, helps to dry the surface so that mowing and play can start sooner.

Night watering keeps the grass wet longer and increases opportunities for disease.

So, when a good watering is needed to restore moisture in the soil do it in early morning, if possible. In the heat of the day use the hose just lightly to "syringe" and cool the grass to stop wilt. Remember the slogan, "Water as Needed."

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