
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.

Don't Drown the Grass

TIME was when I made very positive statements to the effect that "most of our turf troubles are caused by too much water." Bob Hagan of California took issue with me and wrote that the statement would be more nearly accurate if it said, "Most of our turf troubles are caused by too little water too often". I am sure that there are cases where both statements are correct. At any rate, the misuse of water is a serious offense and is one that demands much attention.

Recently I visited a course where soil cores indicated perfect soil moisture. At least, it looked perfect to me. The grass was starving for nitrogen but I considered that the green would not need water for three or four days. We proceeded around the course and upon our return saw that every green was being flooded so that excess water ran off in streams and filled every depression on every green and approach. Upon analyzing the situation I realized the greensmen believed that the yellow color of the grass was due to lack of water — actually it was due to nitrogen starvation.

The symptoms often are confused and are quite similar. In this case nitrogen would be cheap compared to the high cost of frequent watering and the subsequent damage to the turf. The grass had no

roots below the first half-inch of surface soil. The grass had no resistance to diseases or insects and no ability to take wear and tear. Recovery from injuries was extremely slow.

Watering such as I have described creates weed problems (poa annua, chickweed, pearlwort, goosegrass). When poa invades there is general consternation and the belief is prevalent that "poa is crowding out good grasses." Actually, the good grasses were to the point where they had no ability to resist poa or anything else. "But," I hear, "if I stop watering my poa I'll lose it and I can't afford to do that. I've got to keep it looking good."

One of the unseen results of water mismanagement is the effect on the bacteria. Constant saturation forces air out of the spaces in the soil. Without air the good bacteria drown—they simply can't operate. The fungi (disease-producing) have a "field day." That means spray for disease, boys. Without air the grass roots can absorb neither water nor plant nutrients—so the grass wilts and starves. Encouraging bacteria is of the utmost importance now with so much fertilizer being used that demands good aeration for steady controlled release.

One of the common excuses for using lots of water (or too little too often) is that "the greens are hard." Water used as a "soil softener" can easily result in even harder surfaces which demand more water to "soften" them which makes them still harder and — whoa!! Let's stop this vicious cycle right now.

Greens can be encouraged to hold a shot even when the soil is dry by (1) more adequate feeding so that there is a constant uniform supply of nutrients from controlled-release materials. Well-fed grass tends to build a desirable cushion which will hold a shot. (2) Better aeration by occasional use of machines and by the improvement of the physical condition of the soil through the use of sand. (3) Teaching players how to hit a shot to a firm green.

Firm turf plays much better than soft sloppy turf. Greater accuracy and control are possible and the results achieved give greater satisfaction.

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Hard and Soft Greens

Q. I have read with considerable interest your bulletins on the subject of growing grass. We are having considerable trouble here with our Highland bent greens and I would like your advice on one point. I have noted your theory about not watering grass too often. I have al-