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# Turfgrass Questions Answered by Grau

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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.

COMES now the season when golf is the heaviest, temperatures are highest, humidity possibly greatest, diseases the "spreadingest" — when grasses and supts. get their most severe test. This is the period during which better grasses, adapted to severe summer weather, provide nearly care-free maintenance. Quite the opposite are weak, poorly-adapted grasses that require 24-hour days (and sleepless nights) on the part of supts. to try to "hold the turf".

**Poa Annua —  
Friend  
or  
Foe**

For the moment, let us consider *Poa annua*. *Poa* is either a blessing or a pesky weed depending upon where you are and what you have under it to take over when the *Poa* leaves. Florida threatens to banish forever anyone who sends *Poa* into the state knowingly or otherwise. In parts of Canada and some of our northern states there wouldn't be much golf if it were not for the rugged character of *Poa*. Many are in between depending upon a number of factors.

*Poa* has been receiving well-deserved attention as a cool-season companion to warm-season grasses. Evidence is growing as to the desirability of the combination when the turf is managed correctly! The answers to correct management have not been written as yet, but experience has given a lot of good leads.

First of all, we need a strong perennial summer grass (warm-season grass) under *Poa*. This may be a bentgrass or a strain of bermuda. Among the bents, Washington strain is a good hot-weather grass, yielding gracefully to *Poa* during cool seasons. In general, evaluation of bents has been given little or no prominence in research studies. In practical use this is a major consideration. Whether base grass is bent or bermuda, it is important that it be sturdy, disease-resistant and tolerant of being cov-

ered during its dormant period. Since *poa* fades and "disappears", sometimes "explosively", it is equally important that base grass thrives and be ready to assume complete charge of the situation. Some progress has been made in this direction.

"How to hold what we've got" is a real need because only a few have achieved care-free maintenance. The answer lies in doing the right things at the right times — and the book hasn't been written that will tell you what and when. It is a case of understanding principles of plant growth, water and soil, knowing why certain things happen, and living with your problems.

It seems to me that all the successful hot-weather practices — syringing, showering-off, spiking, etc.—accomplish one thing in common. They supply life-giving oxygen to suffocating root systems. As temperatures soar, water in the soil surface gets hot and then hotter. Hot water contains little oxygen. This is the time when growth rates, and thus oxygen requirements, are highest. Heavy traffic and watering seal the surfaces and reduce air movement into and out of the root zone. Spiking, a great invention, helps to achieve air circulation. Sprinkling refreshes the grass by bringing needed oxygen. Cold water contains much more dissolved oxygen than hot water. The grass actually may have an excess of water and yet be in a state of wilt (wet wilt). Additional water is not needed, but its oxygen is vitally important.

We deprecate the need for summer mid-day syringing, yet we know that it's absolutely necessary to save grass during severe spells of weather. We believe that a better day is coming as we learn how to use the better strains of grass and improved techniques of soil and water management in relation to soil physics.

**Q—We are experiencing our first real siege of *Poa Annua* in some of our greens, especially ones on which we had some brown patch last season. What can we do to check or stop this infestation? We had the good fortune last**