Not so long ago, when the turfgrass industry was an infant, one individual could cover the United States and do a fair job of advising various segments of the industry on virtually every phase of management from agaricus to zoysia. On a limited scale there is still a place for the generalist, but the industry has become more complex and sophisticated so that today the specialist occupies the spotlight.

Proper treatment of a disease demands accurate identification by a pathologist. Soil modification and treatment can be handled best by an agronomist. We could continue through botany, weed control, plant breeding, seed and sod production, irrigation and drainage and many more. Suffice it to say that the entire turfgrass industry will grow and benefit in direct proportion to the teamwork that is displayed by each segment working with unified effort.

Turfgrass councils and foundations today represent the best approach to unification of all interests, whether they are organized on a state or regional basis. For many years the industry has revolved closely around golf. State and local associations, superintendents' associations as well as golf associations, more and more are supporting their turfgrass councils and foundations which direct funds into the most effective research channels.

Now we see the mushrooming of sod producers on an organized basis. They have their own problems peculiar to their activities, but recent acreage assessments for research clearly indicate their desire for teamwork.

There has been a tremendous response of golf clubs, superintendents, groups, sod growers and individuals to the invitation to become part of the Joseph Valentine Living Memorial. This memorial is the international focal point for all who believe in the concept of better turf. Nothing so clearly could tell the world that the turfgrass industry has come of age and is an integral part of everyday living.

Each of us can swell with pride when we think that we are contributing to the herculean efforts in research, teaching and extension by men like Duich, Juska, Daniel, Beard, Engel, Youngner, Goss, Burton, Miller, Davis, Huffine, Roberts, Harper, and many others.

Their ability to perform is directly dependent upon moral and financial support which, today, is coming largely through the efforts of turfgrass councils and foundations.

A council or a foundation is a unified voice which has stature in the legislative halls. Forty years ago the most articulate voice in Pennsylvania's legislature was that of Joseph Valentine—it carried authority! Truly, we have come far!

Q.—Our new club just opened and I am having trouble with color on my greens, tees and fairways. When we had a lot of rain our grass was nice and green. Now we pump water out of a river that has a lot of oil in it and I'm wondering if this could be the trouble. Is there any way to filter out the oil? You can smell it as it comes out of the sprinklers. (New York)

A.—Before your questions can be answered satisfactorily more information is

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needed on a) soil tests, b) fertilizer, c) water tests. We shall be glad to help when we hear more from you.

Reply to my letter: Sorry I didn’t give you more information. I had more problems than just oil. I don’t have an oil problem anymore—I took all I could stand and quit my job. My son, who was my assistant, quit at the same time.

Q.—How often should we put calcined clay into our greens?  (Michigan)

A.—This can not be answered satisfactorily with no knowledge of your soil conditions. The introduction of this material can be expected to improve infiltration rate. When water enters the soil slowly and with difficulty it probably is time to cultivate and introduce some calcined clay or a mixture of clay and sand.

Q.—I would like information on correspondence courses at home; also schools for running and keeping golf courses. My work last year consisted of helping to maintain the golf course at this base. I like the work.  (Michigan — an Air Force Base)

A.—We know of no correspondence courses in turfgrass management that we can recommend to you. Successful management of a golf course (or any turfgrass complex) depends upon educated decisions concerning the existing conditions. No one successfully has found a way to teach this vast subject short of getting mud and grease under the fingernails and grime in the clothes. Exact subjects (mathematics) can be taught by correspondence. (I once took the course.) You will be well advised to write to your turfgrass headquarters in your state —Michigan State University, East Lansing, Michigan. Dr. James Beard can be of great help to you. Keep on the course —the industry needs dedicated men who like the work.  continued on page 75
**Grau’s Answers**  
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**Q.**—In a national magazine just recently a professor from a respected midwestern university was quoted as saying that, if one uses slow-release fertilizers, one must use more than if he used ordinary materials because of the “rapid leaching.” We have understood that one of the advantages of slow-release organics was the high resistance to leaching. This is confusing; can you help us?  

(Indiana)

**A.**—Resistance to leaching truly is one of the advantages of slow-release organic fertilizers. This has been proved by several research workers. The statement “rapid leaching” as applied to slow-release organics is incomprehensible. Perhaps the professor was misquoted. Anyway, rest assured that “rapid leaching” is a feature of solubles, not of slow-release materials.

**Q.**—We have had soil tests run every year for five or six years. Consistently the phosphorus and potash readings are high to very high. Recommendations just as consistently advise the use (liberal) of a complex mixed fertilizer. Isn’t there some point where we can use (temporarily, at least) straight nitrogen without endangering the quality of our turf? There would be a considerable monetary saving.  

(Texas)

**A.**—You may proceed with confidence to use nitrogen alone in quantities suited to the needs of your turf. Continue to test your soils. When P and K (one or both) drop to levels that indicate “shortage,” it will be time to make applications of the needed element(s). When you buy straight N materials you can be sure that you will get what you pay for. No one can hide behind the “60 per cent organic” facade in order to sell you urea in place of the kind of organic N you really wanted.

**Q.**—What size tine do you recommend for opening greens? Is there a possibility of overdoing this and making the greens too hard?  

(Michigan)

**A.**—It depends upon the effect intended. For simply breaking a surface seal to let water and air in, the smallest tine available is OK. Where you expect to introduce soil amendments (replacement), the largest size is recommended. Large tines may roughen the surface more than the small ones but this must be accepted in the interests of soil improvement. Topdressing and rolling soon will restore a smooth surface.

Yes, cultivation can be overdone but the principal effect will be on the members who do not like to have the greens continually roughened. It is highly unlikely that it will make the greens hard.

**Q.**—In appreciation of turf improvement as symbolized by the Joseph Valentine Living Memorial we want to send a contribution. Please tell us where we can send our check.  

(Ohio)

**A.**—Mail your check directly to Joseph Valentine Memorial Fund, Post Office Box 324, State College, Pennsylvania 16801.

**Q.**—Where can one find out about the scope of the turfgrass industry in the United States? Are there any valid surveys available?  

(Iowa)

**A.**—It has been said that the findings of any turfgrass survey would be out of date upon completion. This indicates the rapid growth of this phase of our constantly changing economy.

Published figures from California, New Jersey and Texas are several years old. Pennsylvania is completing the first truly comprehensive state-wide survey by way of the crop reporting service. Figures will be available soon through the Pennsylvania turfgrass council, sponsor of the turfgrass industry survey.