## Turfgrass Questions Answered By FRED V. GRAU

Dr. Grau will welcome questions on course maintenance subjects from superintendents, green chairmen, club and public course officials. There is no charge or obligation attached to this service. Address Queries — Grau, Golfdom, 407 S. Dearborn St., Chicago 5, III.

THE MANY questions that arise about turfgrass management point up how great is the need for information.

We have made much progress, but we still have a long way to go. If each of us had to learn the way alone, we would not make much headway. Fortunately we have organizations that enable us to pool our resources and to progress more rapidly. The Golf Course Superintendents Assn. of America is a shining example of the good results achieved through group effort. This year's meeting will be the 26th National Turfgrass Conference and Show—a long and successful record of working

Cooperation among superintendents has been an important factor in the progress of turfgrass science. But for a long time turfgrass science itself existed alone, a thing apart from other branches of agronomic science. Recognition of turfgrass science by the American Society of Agronomy in 1948 opened the way to greater accomplishment working side by side with men from related fields.

The Turfgrass committee of the Agronomy Society was organized to study the needs of the industry and to stimulate interest in needed research. At the first meeting of our committee in 1948, we made an educated guess as to the scope of the turfgrass industry. These speculations paved the way for the recent Turfgrass Survey in Los Angeles County which obtained concrete evidence of the size and scope of the industry.

Much more of that type of information is needed. When we have figures that prove the value of our industry it is much easier to get administrators to take notice and to allot us our share of the funds for research. The aims of the committees are very practical ones!

Other practical accomplishments of the committee include discussion of certification of seed and stolons to protect the interests of you, the consumer. The commit-

tee reviews problems and makes recommendations for problems to be considered by research agencies.

The Turfgrass committee gives recognition to graduate students, and encourages students to participate in the turfgrass industry. New blood in the form of young men well-trained for the job is going to have a tremendous stimulation on the industry as a whole. It is significant that several of our agricultural colleges award a B. S. degree in Agriculture to students who specialize in turfgrass management. We are gaining recognition. And we have obtained international Grasslands Congress.

The work of the Turfgrass committee benefits the turfgrass industry in general. Recognition of the industry as a whole gives greater prestige to every individual engaged in it. Through the work of the committee every superintendent gained stature and official standing. Superintendents are welcomed as members of the Agronomy Society because of the valuable practical knowledge which they can contribute. The more member superintendents there are, the greater will be their representation on the Turfgrass committee. This committee is making decisions that affect everyone in the industry and it is important that all phases of the industry be represented.

## Q—How can I become a member of the American Society of Agronomy?

A—Drop a line to L. G. Monthey, Exec. Sec'y, American Society of Agronomy, 2702 Monroe St., Madison 5, Wis. Simply ask for an application blank. Or if you prefer you can address this column and an application blank will be sent to you. Most superintendents probably would prefer the associate, non-voting membership which includes a subscription to Crops and Soils. The cost is \$6 a year.

Q-We were unable to topdress our greens this fall. Is this likely to cause any adverse effects next season? (N. H.)

A-There is no reason for you to be concerned about not having been able to get topdressing on your greens. If they are in good condition they can go through the winter perfectly well without the fall topdressing. In fact, you may be better off. The fall topdressing might have sent the greens into the winter in a softer condition which would make them more prone to snowmold and other types of winter damage. It may be well for you to consider vertical mowing equipment on these greens early next spring to remove any dead stuff that has accumulated which would probably tend to increase trouble from disease in the spring and next sum-

Q-What do you know about the new crabgrass killer, di-sodium methyl arsonate? (O.)

A-This chemical has been tested in a limited way for about a year, and we do not yet have documented reports on it only evidence from local testing. There it shows unusual promise for the control of annual grasses, including crabgrass and goosegrass. It is reported that there is only slight effect on the perennial grasses, even the bentgrasses. The action of the material appears to be different from that of sodium arsenite. It seems to be important that the soil moisture be favorable when the material is used. This chemical has been distributed thus far only on an experimental basis, though there are plans to market it on a national scale in 1955.

Q—What is a good size for a nursery of improved grasses? (Ore.)

A—The minimum size for a nursery would be one large enough to resod two putting greens. On most courses this would be about 10,000 sq. ft.

Q—We wish to try out an improved Bermudagrass on several of our greens. How heavily should we seed? Is the seed very expensive? (La.)

A—All improved Bermudagrasses are bought in stolon or sprig form. There is no seed of these improved grasses. The improved Bermudas cost anywhere from \$10 to \$40 for enough grass to establish 1,000 sq. ft., depending upon the kind, the source and the rate of planting. The higher figure is almost exactly the cost of creeping bent stolons which are used throughout the north and parts of the southwest. I would suggest you establish



PLAYING SURE BETS IN GRASS

Turf experts inspect Desert In CC green at Las Vegas, Nev., where Wilbur Clark spent \$1,250,000 getting a finely-conditioned course. L to R Charles Wilson, O. J. Noer, James Watson and Howard Capps, Desert Inn pro.

the improved Bermuda in a nursery, which should be maintained in putting green condition. Then the improved grass can be introduced into the greens by plugging. By using a turf plugger, the greens can be changed without taking them out of play or inconveniencing the players.

Q—We do not have a very large budget to work with. Can you tell me an inexpensive way to remove heavy mat from greens? (Wis.)

A—I do not know of any inexpensive way to remove heavy mat from greens because it will either take a machine or it will take expensive hand labor. Probably it would be less expensive to remove the mat mechanically with a vertical mower than with hand labor. The machine can be used in many ways, but once you have spent your money for labor it cannot be used again.

Q—We have considerable trouble with pocket gophers on our course. We have been trapping them but it is impossible to keep up with them. Can you recommend an easy way to eliminate them? (N. Dak.)

A—Apparently gophers relish crisp lettuce leaves. Superintendents have found that sprinkling zinc phosphide powder on lettuce leaves and inserting them into a fresh gopher run is very successful.

Q—Every year we are troubled by clover showing up in the greens in late September and early October. Does it remain alive during the winter months or reseed itself each year? Can we control it with sulfate of ammonia? What is the best method of doing this? (Pa.)

A—Since your clover does not appear in early spring or late summer, but in late September and early October, it indicates to me that the grass may be weakened by a combination of brownpatch and dollarspot. It also could be due to the fact that your greens have not received sufficient fertilizer during the summer to make them strong enough to resist the invasion of clover later in the season.

Clover does stay dormant during the months that it is not showing on the surface. Clover does seed itself but it does not necessarily have to reseed itself. The root system can stay alive over many

months or even years.

Applying sulfate of ammonia may not completely eradicate the clover, because it can come back unless you establish a turf dense enough to prevent it from returning. This essentially is through the introduction and proper management of strains of grasses that are disease-resistant and are aggressive enough to choke out the clover. One of the best in recent years has been the new Pennlu strain of creeping bent. This can be introduced into the greens with a cup cutter or a turf plugger, and the players will not be inconvenienced in any way while this is being done.

When applying sulfate of ammonia on clover it is best first to bruise the clover by rubbing with the shoe, the back of a rake or some other device. Then the sulfate of ammonia scattered dry on the clover will quickly burn the clover leaves. After a few hours in the sun the sulfate can be washed into the green where it will nourish the grass but the clover will take

longer to recover.

Q—Will you please comment on the enclosed clipping, referring to the control of goosegrass, silver crab or crowfoot with a phenyl mercury and 2, 4-D mixture? (Ia.)

A—I would be quite unwilling to recommend this treatment for Washington or Congressional greens in the Iowa territory. I am very much afraid this mixture would irreparably damage the bentgrasses if there was any slip-up in the rate or method of application. In some cases the phenyl mercury and 2, 4-D mixture has been used on bentgrasses, but at a very reduced rate and under particularly favorable conditions. I do not believe that anybody is recommending this treatment in a general way.

You must consider that in the instance mentioned in the clipping, the mixture was being used on Bermudagrass, which has a tremendous power to recuperate from anything that is done to it. The bentgrasses on your greens probably do not have the same ability.

## PGA Seniors Set Dunedin Big Week, Jan. 24-30

HUGH BANCROFT, pres., PGA Seniors, and his venerable associates have set the program for the PGA Old Settlers' week which will culminate Jan. 30 in the final round of the PGA Seniors' championship at the PGA National course, Dunedin, Fla.

Jan. 24 will be open for warm-up play. Senior pro, best-ball foursome and the annual meeting will be on Jan. 25 and the annual banquet will be Jan. 26.

Wm. Teacher & Sons Ltd. again picks up the tab for travelling expenses for section qualifiers for the PGA Seniors, the match between the US and British Seniors' championships, and the Teacher's

trophy awarded the winner.

The PGA Quarter Century Club, for those who have been PGA members 25 years or more, will be played during the veterans' gathering. Prize money from the Professional Golfers' Corp., Knoxville, Tenn., has been arranged by Quarter Century Club pres. John Inglis.

This will be the 16th PGA Seniors' championship. Jock Hutchison won the first one in 1937. No championships were

played in 1943 and '44.

The Tournament committee is headed by John Watson and includes Jack Williams, George Ferrier, Ralph Beach and Gene Sarazen. Special committee for the annual reunion consists of George Livingstone, Charles Mayo and George Dodge. Officers of PGA Seniors, besides Bancroft are Honorary pres. Otto Hardt, 1st vp Marty Cromb, 2d vp Carroll McMaster and sec.-treas. Willie Whalen.

Mrs. John Watson heads the banquet committee of the PGA Seniors Ladies' Auxiliary.

For doing valuable work added to already heavy schedule editors of the bulletins of the various sectional course superintendents associations deserve hearty thanks from their colleagues and golfers in their sections. These fellows gather a lot of close-up stuff that can be used right on the jobs in their areas.