GOLF COURSE CONSTRUCTION COMPANY
R. ALBERT ANDERSON
GOLF COURSE ARCHITECTS BUILDERS
25 Years' Experience

Our organization is in a position to finance a portion of new golf course design and construction — in one package.

The responsive cooperation of golf course committees, superintendents and professionals of the numerous courses we have constructed speaks for the advantages of our project planning and procedure.

As experienced specialists we keep informed on golf course construction and turf requirements in all parts of the country.

- Modern construction
- Maintenance ease and economy
- Tees — up to 240 ft. long; dual tees; L-shaped tees
- Greens—gently rolling with 7500 sq. ft. of putting surface; elevated between 4 ft. and 9 ft.; properly drained.

R. Albert Anderson
6300 Gulf of Mexico Drive, Longboat Key, Fla.
3814 Washington Ave., Racine, Wisc.

Marvin Ferguson, USGA research director: We cannot adequately measure the value of turf research. We can only assess its value in terms of the seriousness of the problems that have to be solved. How much would it be worth to control poa annua? Nobody can say accurately, but everybody in the turf field knows that we want to get rid of it.

Control Disease Through Good Management
By MALCOLM C. SHURTLEFF
Iowa State University

Nutrition is not only important to grass plants but it is also important to disease organisms because, as you know, the organisms can't manufacture their own food — they have to get food from the organic matter in the soil. This may consist of old dead roots or fat or even healthy plants.

Many of these organisms can go either way — they can feed on dead organic matter or, if conditions in the green or fairway favor it, they can attack healthy plants. When that happens you get a disease situation.

The work at Washington State by Dr. Gould is showing the importance of nutrition in controlling some turf diseases. In fact, he believes you can control some of them by reducing your nutrition.

For many years it has been known that a high state of fertility will increase brown-patch, etc. Fungi in the ground feed on the nutrients and, of course, when you apply fertilizer to the soil, you are also feeding microorganisms, some of which are your enemies and some your friends.

Top Layer Menace
Further, there are about a ton of microorganisms in the top layer of soil. These organisms attack healthy plants. In a small spot of soil in the average green there may be hundreds of thousands of fungi, some of which, of course, are pathogens.

Watering is another important practice and I suppose that more diseases are either conquered or lost through poor watering practices than anything else.

Cutting is also important. This is signified by the fact that if you cut your grass too short it will be subjected to fast deterioration or death or attack by various diseases.

Keeping grass vigorous, keeping it growing at a steady rate throughout the growing season, treating grass like you would your own son is the best way to control disease.
Another point in the cultural control program is the development of resistance grasses. Actually, we have just barely touched the surface on this and, of course, much research could be done, particularly in screening new grasses or new sections against disease organisms.

There are about 15 major diseases and perhaps 100 to 150 different organisms involved. Of course, it is a rather difficult job to put new grasses and new selections through a research program, knock them out with the disease and then get them to survive. This has not been done very often in the past but, as I said, it is being done more and more today.

I would say that there are many different grasses throughout the U. S. which should be collected together at several centers and developed commercially — put into breathing programs.

I have visited many courses and at one course, for instance, we used maybe 20 applications of fungicide in a season. Down the road perhaps a mile was another course, equally well kept, greens in perfect shape and it used only five applications of fungicide. The difference in many cases is simply a difference in cultural programs.

Therefore, I think that the fungicides are secondary to a good maintenance program and, certainly, a good fungicide under poor cultural conditions will not do a good job.

Cameron Henderson, supt., CC of Buffalo, N. Y.: Once it took six men an hour to hand fork a green. Today, one man aerifies a green in 30 minutes. That doesn't mean that we can constantly cut clown on the number of employees needed to operate a course efficiently. As I see it, the time saved on one job should be allocated to others that often are woefully neglected.

How the Landscaper Paints

Pictures with Plants

By CLARENCE GOTTSCHALK

Director, Morton Arboretum, Lisle, Ill.

My definition of landscaping is the creating of pictures by designing or changing a site and selecting an arrangement of plants on that site to accomplish the purpose for which the planting is designed, as well as give an aesthetic effect that is pleasing to behold.