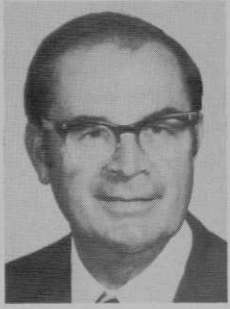


Superintendent skills

By Jim Converse



Jim Converse is one of America's leading botanical artists. His paintings and drawings have appeared in numerous national publications, and his weed and grass identification books have become standard tools of the trade. Jim is far more than a botanical artist, however, with years of

practical turf experience. Before assuming turf management responsibilities at OM Scott & Sons Company, more than 20 years ago, he worked as a golf course superintendent. After tours in Scotts Research and Retail Training areas, Jim was transferred to the ProTurf Division where he headed their training and educational programs. He is currently concentrating his talents in the area of visual communications.

Improved turfgrasses

Many times the golf course superintendent has an opportunity to attend a field day and inspect various turf plots. It's quite natural to be impressed by those grass varieties that look exceptionally good. But, that first impression, like most other first impressions, should always be tempered and weighed. Only after a particular grass has delivered a proven performance year after year and under a full scale of adversities can it ever become an exceptional turfgrass. Even then, a grass still has its limitations, because it can be a tremendous success in one part of the country and a complete failure in another.

Some grass varieties are the result of hybridization, or the crossing of two parent plants to form a unique offspring. But, a far greater number of new varieties have evolved from a process called "natural selection." "Natural selection" means finding a plant, or cluster of plants, that exhibit some exceptional qualities or characteristics. Most of today's improved bluegrasses have been developed through this system.

It's probable that the first quality desired in natural selection is a pleasing dark green color, but there are many other important considerations. Growth habit and leaf texture are very significant. If vigor is especially desirable, the single plant that thrives in an area of heavy traffic and compaction should be a strong candidate. Along these same lines, what about the healthy plant surrounded by turf destroyed by disease? There are many things that a turfgrass scientist must

consider in natural selections, and because of the sameness of any piece of turf, finding a truly unusual plant must be extremely difficult. When that truly unusual plant has been found, it's only the first step in a long series of events that can take years to complete. The odds against any single grass plant eventually becoming a grass variety are more than astronomical.

It takes about two years before our new plant has produced enough seed to even start testing it as a turfgrass. Depending upon the depth and scope of research, in the days, months and years that follow, the new turfgrass will be subjected to many critical stresses and evaluations. Continuous ratings are given for quality of cut, performance under various cutting heights, color during all seasons, density, growth habit, leaf texture, disease resistance, shade and drought tolerance and whatever else the turf researcher feels is important. It's a cold, hard, time consuming and often disappointing procedure. A grass plant can easily be carried into a program for four or five years and then exhibit a glaring weakness that makes further exploration impossible. Unfortunately, environmental circumstances are not predictable, but a good turfgrass is expected to survive and thrive through all variables.

If a new turfgrass has the good fortune to survive low cutting and other abuses, while retaining high marks in desirable characteristics for a long period of time, it has a fair chance of becoming a variety. But, there are at least two other steps that play a large part in determining success, or failure. This new grass must be able to perform in actual use situations over a wide area of geographic adaptability. These areas are often golf course fairways, tees, homelawns, playgrounds, athletic fields, or anyplace where turf is subject to variable uses and degrees of care. As in the original testing, results must necessarily be evaluated over several growing seasons of environmental variation. If the grass performs poorly in any region of this zone of adaptability, chances for success are again diminished, if not eliminated. Somewhere during the program of evaluation, the turfgrass scientist must make a determination that has nothing to do with turf. From the first tiny harvest of seeds for

additional research, until the variety is accepted, or rejected, there has to be a secure knowledge of what kind of seed producer this variety will be. It's an extremely important consideration. Without a fair return on investment, there would be no improved turfgrasses and no continuing research. Professional growers in the Pacific Northwest with a great investment in land and specialized equipment must also be assured of a fair profit. Without some assurance, there would be no incentive to stay in this highly restrictive and exacting business.

When the golf course superintendent, or other turf professional makes a decision to plant seed, his purchase should be given more than a casual appraisal. The seed that he places in the ground will be expected to produce an exceptional turf for many, many years. But, quite often the turf is less than adequate and there are continual maintenance problems. A superintendent must know and evaluate the seed that is available in his area and what is unquestionably best for his particular situation. Since there are no truly flawless individual performers, he must also weigh the advantages of using varieties to produce a strong blend.

Planting grass seed is today's choice, and the wisdom of the choice can only be evaluated in the future. A poor selection could bring a bitter memory through continuous problems. Unfortunately, these problems, once established can be almost impossible to eradicate.

In actuality, the difference in price between quality seed and poor seed is very small. If a variety has been properly and thoroughly researched, by universities and industry, there can be no sensational bargains. Occasionally a new variety will break on the scene with much fanfare, but few credentials. When this happens, the consumer bears the burden of final research, and it can be quite costly.

Years of painstaking evaluations have gone into the establishment of today's improved turfgrass varieties. And many new selections are constantly being exposed to the rigors of critical examination. It's an absolute certainty that none will reach the top without solid credentials and proven performance. With so many good choices available, there seems to be little reason to plant anything but the best.