The problem of renovating turf is one that is faced at sometime or other by everyone engaged in the broad turf field. When the area under consideration happens to be a special purpose turf, such as a golf course fairway which is expected to be kept in constant use while the work progresses, the question of whether to renovate or not becomes critical. There are many facets to examine, many considerations to study. Let's look into some of the things we think important to the question.

What is meant by fairway renovation? When we speak of fairway renovation, we think in terms of renewing and improving the turf surface: the changeover from unadapted grasses to grasses adapted for fairway play. Although we think in terms of changing over the turf cover, we must first correct whatever deficiencies there are and set up the required program of maintenance and management that will insure that the new turf grasses will do what is expected of them. For example, in some soils seepage or drainage problems exist and these must first be corrected. If nutrient levels of any of the elements that we know are important to grass growth, such as levels of calcium, magnesium, phosphorus or potash, are limited, they must be corrected before any new cover can be expected to thrive. If the fairways in question have reverted to weeds of one sort or another, the answers to why this happened must be resolved before any hope of establishing adapted grasses can be entertained.

Who wants renovation? The desires of the superintendents and the membership must be considered. We have made some progress in renovation techniques; today we have more "know how", improved grasses, better chemicals, improved equipment and therefore, more efficiency in getting the job done. Also, there is no question that the standards of the game of golf are higher than those of yesteryear. Progress has been made in the golf turf field, and superintendents desire to modernize and incorporate new findings into their program at their individual clubs. Another important consideration is that members themselves request fairway improvement.

Today's golfer is an adventurous soul . . . he gets around more and sees more. He plays many different courses during the season; therefore, it is natural for him to ask why he can't have some of these things at his course. He hears of new herbicides performing a renovation job by eliminating weeds selectively and asks, "Why can't this be done at our course?" And so the subject of renovation of one sort or another is almost a continuous or endless cycle. You cannot hold this against a membership for wanting to improve; to want improvement is a natural desire. Whether such improvements are feasible is a question that the superintendent must answer.

Should you renovate? Here are some thoughts for consideration. First, a survey of the areas to be renovated should be made; the degree of renovation should be determined, and a tentative cost estimate should be drawn up. These are the material costs such as seed, chemicals, labor and equipment depreciation. Material costs for an average fairway renovation task is usually quite nominal when prorated over a period of years. This fact serves to spur on the renovation-minded member.

Before any program is undertaken, we feel these points are important to consider: (1) will the members be informed of what is going on? (in this respect,
the superintendent might draw up a letter with the proposed renovation schedule so the members will know what to expect). (2) will the membership stand behind the program of management necessary to keep the improved turfgrasses? This, of course, is a must, as renovation cannot be entirely successful unless a program of management to suit the requirements of the particular grass is followed.

Like everything that we do, we must weight the good and bad features before proceeding. Let's review some of the bad features first:

1. Player inconvenience. The golfer normally wants no part of any practice that will interfere with his golfing pleasure. The intangible costs far outweigh the material costs of a renovation project. This could be a strong factor in the decision as to whether or not any renovation project takes place.

2. Time consumed in completing the renovation project. This factor could be either listed under good or bad features, depending upon the amount of time consumed to complete the project. If the rough work could be completed in reasonable time, weather conditions permitting, then much less weight can be attached to the interference factor. The many factors that enter into the timing of the project will be discussed separately under timing of renovation.

3. Heavy play on course today ... player interference with work schedule.

4. Renovation must be done in addition to the regular maintenance and management practices. Normally, little if any extra help is provided when a new project is tackled. Therefore, care should be taken that only enough work be planned that could be carried to successful completion.

5. Results are sometimes slow in showing.

Some of the good features are as follows:

1. The conversion to grasses adapted for fairway play is the improvement that is most apparent, and is the criteria by which the members judge results.

2. The improvement made in soils, drainage and/or seepage.

3. Player satisfaction and more playing pleasure as a result of introducing adapted grasses.

4. Good efficiency of present day superintendents insures nominal material costs of renovation. Improved techniques, equipment, grasses and chemicals insure this.

There are but a few techniques used in renovation; each have met with success and the choice depends upon personal preference. One suggested program is as follows:

1. Thatch 3/4 to 1 inch deep.
2. Sweep and remove debris.
3. Aerate 8-10 times over, 1/2 to 3/4 inch in depth; 3/4 inch spoons should be used.
4. Apply seed by broadcasting and disc drilling.
5. Drag in with a chain link fence.
7. Water until germination is completed.
8. Begin your fertilizer program gradually.

When an aeration program alone is being conducted, it is important to follow an exact cultural timing practice. Let the young seedlings have favorable growing conditions to be able to compete with the mature turf population. This particular program should be conducted for at least three consecutive years.

Some believe in the scorched earth program, killing off all vegetation with cyanamid or sodium arsenite or similar chemicals. A typical scorched earth program would be as follows:

1. Burn off vegetation with liquid sodium arsenite at the rate of 5 gallons per acre.
2. Thatch or aerate immediately after application. Thatch once, aerate 8-10 times.
3. Water every second day to have all weeds germinate.
4. One week after first application of sodium arsenite, apply another application at the rate of 3 gallons per acre.
5. Two days after this final operation of applying the sodium arsenite, thatch once and seed.
6. Drag with a chain link fence.
7. Mow twice in opposite directions.
8. Apply fertilizer and water to establish your turf.

The timing of the renovation project and the time within which the project is completed are very important considerations. There is a right and wrong time to seed. To propose renovation during the mid-summer period in the Mid-Continent usually meets with objections from the membership. The club championship matches have just about reached the half-way mark and therefore, players want to delay disturbing the grass or soil. Also, the climate at this time is ideal for golf and play is quite heavy. Therefore, a good job of selling is required to convince the membership that the only time to renovate is the right time. The only program to follow is the right program. It is important to leave no stone unturned to insure success; plan every detail carefully; do every phase of the work carefully; leave nothing to chance. Success or failure in this project will determine to a large extent whether or not any other new projects of improvement will be undertaken.