take the work in one or in several stages. The cost of each method requires careful study, and the program best suited to all requirements should be chosen.

Last year, the Federal Excise Tax Technical Changes Act was passed. This should prove of substantial aid to clubs undertaking improvement projects. In brief, it provides that assessments for the construction or reconstruction of any social, athletic, or sporting facility (or any capital addition thereto) or for the construction or reconstruction of any capital improvement of any such facility are exempt from the 20 per cent dues tax. Therefore, an assessment for remodeling or reconstruction of \$16,000 now will be the equal of \$20,000 in dues, so far as the impact on the membership is concerned.

Other methods of saving or raising money are: (1) short term bank loans, with notes endorsed by at least two responsible members or officers of the club, (2) bonds issued to members (this method has not proved successful at all clubs as the bonds usually bear low interest and are often paid by assessments), (3) assessments, levied for a fixed amount as a monthly charge and labeled in many different ways, such as "new projects", "fertilizing program", "water system" and "caddie service fund."

There are also voluntary assessments, where members are asked to donate for a specific project or fund. Many times those that derive the most benefit do not donate.

Another source of income is a small charge of perhaps 25 cents per round of golf. With a possibility of 13,000 to 20,000 rounds of golf per year on an 18 hole course, this can raise a fair sum. Green

COMING EVENTS

August 4
U.S.D.A. Turf Field Day
Plant Industry Station
Beltsville, Md.
Dr. Felix V. Juska

August 6
Rutgers Turfgrass Field Day
Rutgers University
New Brunswick, N. J.
Dr. Ralph E. Engel

September 17 and 18

28th Annual Golf Course Superintendents'
Turfgrass Field Day
University of Rhode Island
Kingston,, R. I.

fees also can provide a substantial sum for lesser projects such as extension of tees and path and road improvements.

Regardless of the scope of the remodeling projects, the course superintendent and the green committee chairman should cooperate in establishing the agenda for the program. If drastic changes are to be made, consult a golf course architect.

A word of caution: Be most careful in wording letters that refer to assessments, so that they strictly conform with the Excise Tax Technical Changes Act. Many club officials will recall the mixup over the tax on lockers. Some clubs tried to get around the dues tax by reducing the cost of membership but compensating for these clubs today are still paying fines and back taxes because of this attempt to circumvent this tax law.

The club must be certain that it complies strictly with the new tax law, otherwise it may endanger its very existence.

The Time Factor In Remodeling

BY T. T. TAYLOR

Northeastern Agronomist, USGA Green Section

In considering time as a factor in the remodeling of a golf course, it brings to mind two concepts of time, (1) time as it relates to the duration of the project as a whole, or the completion in its entirety of a master plan, and (2) time as it relates to the occurrence of any particular phase of the project, in other words, timing or scheduling.

How duration and timing or scheduling contribute to the success of the master plan is the purpose of this discussion.

The master plan may be divided into several parts such as architectural changes desired, financing, preliminary or investigational phases, and the actual construction and planting. The construction and planting phases of the master

plan of remodeling are the culmination of the program.

Before undertaking the actual work program, those responsible for the work, the superintendent and chairman of the green committee, should be intimately familiar with the problems peculiar to their own conditions and what should be done for the solution of those problems. Some preliminary work or investigation may be advisable in obtaining the maximum amount of information possible.

What grass or grasses are best adapted to the climatic conditions? What should be the physical composition of the soil? What peculiarities of management are required under existing conditions?

These are examples of the kind of information needed. If the answers to these questions are lacking, then the establishment of an observational and test area may be desirable. A putting green, a tee, or even part of a fairway should be suitable as a testing area.

Several sources of information available for the initial selection of grass types include experiment stations, golf courses in the area, and the USGA Green Section.

The testing of grasses takes time, and it may require a period of several years in advance of the scheduling of the planting dates to obtain desired information. However, during this period, answers to other questions relating to soil composition and management may be acquired simultaneously.

If it has been determined that it is feasible and economical to grow planting material in a nursery on the property, timing again becomes a factor, both as to duration and time of the planting. To have one's own source of planting material may save time and money, and the uniformity of materials may better be assured, but this may be offset by the necessary delay in carrying out your project.

Timing is just as important in the construction work as it is in the planting phase of the project, but the scheduling of some of the construction work is more flexible than that of the planting schedule, and much of the rough work or foundation of construction may be accomplished during the off-season of play and regular maintenance.

This flexibility offers several important

aspects: it may be done in progressive stages; it may be done in a late or early season, with perhaps some seasonal limitations such as rain or cold weather; and again, at a time when play is at a minimum.

As much of the construction as possible should be accomplished without disrupting the normal habits of the players and the maintenance crew. Only through orderly procedure can the final stages of construction and planting be accomplished on schedule and within the time limits determined and regulated by weather. It is because nature determines how and when much of the construction and planting work is to be accomplished that timing becomes so important a factor. Thus, thorough planning is very important.

Having determined certain requirements through early planning, one may progress to the procedures less hampered by the limitations of weather and play: establishment of a nursery as soon as the type of grass has been selected and it has been decided to either stolonize or sod, would assure ample planting material when the greens or other areas are to be turfed; the preparation of topsoil, incorporating the ingredients of sand, soil and humus in the proportions previously determined; sterilization of the soil and stockpiling at or near the site where it is to be used, if possible, would certainly expedite the final stages of construction and planting; preparation of areas to be used for temporary play would relieve the pressure of work and reduce the inconvenience to the players if properly timed; the spreading of gravel on the finished sub-grade of greens may be desirable.

These are only a few illustrations of the jobs which may be done in between

TURF MANAGEMENT

The book "Turf Management," sponsored by the United States Golf Association and edited by Prof. H. B. Musser, is a complete and authoritative guide in the practical development of golf-course turfs.

This 354-page volume is available through the USGA, 40 East 38th Street, New York 16, N. Y., the USGA Green Section Regional Offices, the McGraw-Hill Book Co., 350 West 42nd Street, New York 36, N. Y., or local bookstores. The cost is \$7. the more important tasks for which the time requirement is less flexible.

Reference has been made to duration as one concept of time in the remodeling program. The order of the two concepts of time has been purposely reversed in this discussion, with the accent on timing or scheduling, since it is in this area of the master plan that organization and ability to execute the time schedule are of greater importance. However, the duration of the construction and planting period may have a decided influence on the solution of several important problems most certainly to be encountered: (1) Are temporary greens a part of the plan? (2) Is the work to be completed during the period of one season? (3) Is the work to be done in separate stages of four, six, or nine holes at a time spread over several seasons? (4) What is the case for and against temporary greens? (5) Can sodding "cancel out" the turf establishment time factor?

These are questions which have a direct hearing on the time element involved in the accomplishment of the master plan, and they are worthy of consideration. A positive approach to the answers to these questions may more readily provide the solutions.

In most cases where terrain permits, temporary greens can be established and they can be made sufficiently satisfactory so as not to antagonize the membership. With the help of the architect, temporary greens can be made interesting and a challenge to the golfer, with the minimum of inconvenience. Much can be done to lessen opposition from the membership by the officials and the green committee by stimulating an enthusiasm for the program, and by doing a good job of keeping members informed of plans and progress. Doing nine holes at a time

is usually a fairly satisfactory way of handling this problem.

The case against temporary greens seems to resolve itself into inconvenience and frustration to the player, increased cost, and loss of revenue. Temporary greens are not usually as puttable as are regular greens and they are sometimes frustrating to the exacting golfer. Temporary greens must be maintained with the labor which may be urgently needed to keep up with the construction and planting schedule. Loss of revenue from outside tournaments and guest fees, and a possible drop in membership play, also may be disadvantages.

As to whether or not sodding can be used to cancel out the turf establishment time factor, it would seem, from the standpoint of duration of time, that it would normally take as long to establish turf in the nursery as it would on the green; but, and this is the all-important factor, from the standpoint of timing and the work schedule, sodding definitely has advantages. Turf density, growth and root development have already been established, and therefore the finished greens may be opened for play sooner than if seed or stolons had been planted and turf not been fully established. It also reduces to a minimum, wash-outs and expensive repairs. On this basis the answer is a preference for sodding.

Thorough planning with respect to time can help immeasurably in carrying out a reconstruction program that will deny members the use of the golf course the fewest possible number of days.

The fourth annual USGA Green Section Educational Program will be held in New York, Friday, January 29, 1960. Details will be announced later this year.

What Is Penncross Creeping Bentgrass?

Numerous inquiries have been made about the parents of Penncross bent. The following statements have been made by Professor H. B. Musser:

'Penncross creeping bentgrass is the first generation (Syn-O) SEED only, produced by random crossing of three vegetatively propagated strains of creeping bentgrass selected for this purpose by the Pennsylvania Agricultural Experiment

Station. Parent strains for Penncross seed production are identified under the following accession numbers:

10(37)4—Pennlu creeping bentgrass

9(38)5

11(38)4

NOTE: The only name strain used is the 10(37)4, which has been approved and released by the Penn State University as Pennlu.