

Outlines Training Program for Course Apprentices

By JOHN E. MORLEY

Club officials seldom realize the extent to which greenkeepers are planning training of young men needed by the increase of golf and the high maintenance standards today's greenkeepers have provided for golfers.

The PGA also is concerned about the problem of training young pros competent to serve the expected increase of clubs and golfers.

John E. Morley, son of the late founder of the National Association of Greenkeepers, spoke before the GSA convention on possibilities of a tie-up between the greenkeepers' national organization and the Dept. of Labor Apprentice Training Service. His remarks outline the job that will have to be done by greenkeeper and pro organizations in fitting into the GI Bill of Rights training projects.



PASSAGE OF THE so-called G. I. Bill of Rights has made America conscious of its responsibility to its returned soldiers, their rehabilitation, readjustment, and training for a worth-while vocation.

Schools, colleges, state and federal agencies are called upon to assist in this program. One of these agencies, the Apprentice Training Service of the United States Department of Labor, has been charged with the responsibility for the promotion and establishment of training programs for recognized skilled trades. It is also the duty of this organization to assist in the establishing of new trades by careful study of their work processes and the required related instruction necessary to make an efficient artisan.

There are today about 150 skilled trades and occupations recognized by the Federal Committee on Apprenticeship, which is the approving body for apprenticeable trades within the Department of Labor. The majority of these trades were formerly in the manufacturing and construction industry, but today an ever increasing number are to be found in the service fields.

While greenkeeping was established in some European countries as a skilled occupation and the recognized approach for preparing a man for this vocation was through apprenticeship, it has never been so established in this country. Whether one should serve an apprenticeship or pursue a course of academic training to

qualify as a greenkeeper has been a question of diversified opinion. A tremendous increase in the number of golfers and golf courses has caused the maintenance factor to become more and more important.

Many greenkeepers have given freely of their time and efforts and passed on to others in the profession the knowledge gained by their experiences. The skills and knowledge of all greenkeepers should be preserved and passed on to those who so ably defended our way of living, many of whom are greenkeepers' sons and grandsons.

Need of Greenkeepers Grows

In order to keep abreast of the ever increasing popularity of golf it is necessary to have available personnel with the skill and technique at all times and under all conditions and courses upon which the golfer may demonstrate his skill and interest in the game. A badly kept course has caused more than one golfer to swear off the game, so to speak, while even a dub gets a thrill from putting on a piece of green velvet. Only the greenkeepers know the answers to the problems of their vocation, and perhaps by working through their own committee in cooperation with the Apprentice Training Service, a plan could be developed by which all embryo greenkeepers would progress step by step in acquiring the knowledge and experience so essential in this field.

There are three methods of approach to the greenkeeper training problem.

1. College training that might leave the learner deficient in the practical part of the work.

2. An on-the-job training plan which would allow the learner to progress only on a catch-as-catch-can basis without the technical knowledge which is fundamental.

3. Through a systematic apprenticeship program which would include both the practical manipulative skills and the technical related instructions, which could be acquired during the winter months at school. This method to be used only if the greenkeepers' group desires to be classified among the skilled artisans and be recognized as a skilled craft, the same as the cutters of fine gems.

If it is the wish of the Greenkeeping Superintendents Assn. to become recognized as a skilled craft, these steps should be followed:

1. Select a small committee of competent greenkeepers that will draft a plan which will apply to the over-all coverage and training by which a greenkeeper may be trained to the point where the members of the Association would be proud to say, "We trained that man."

2. The GSA committee would then submit its plan to the Federal Committee on Apprenticeship with a resolution from the GSA membership, stating that this was the practical way to train greenkeepers.

3. The GSA would then be informed if the Federal Committee on Apprenticeship recognized this occupation as apprenticeable. It is possible, however, that they may decide that this type of work falls within the jurisdiction of the professional fields and would not be considered as an apprenticeable trade, and that one of the other methods of training would be more suitable.

Should this be found to be an apprenticeable occupation, all graduates from the plan would receive a certificate of completion of apprenticeship issued by the Federal Committee on Apprenticeship as evidence that they had learned their trade successfully from a plan developed by the best possible knowledge within the Greenkeepers organization. With that thought in mind, I present a suggested schedule of work processes and related instructions for the training of greenkeepers, as developed by field representatives Baxter and Ferguson of the Federal Committee on Apprenticeship Youngstown office, after consultation with a number of GSA members.

Maintenance and Repairing

all Machinery	10 Months
Sharpening of Tools.....	1 Month
Maintenance and Repairing	
Water System	1 Month

Golf course drainage.....	3 Months
Analyzing of Soil.....	2 Months
Grasses and Soil they are adaptable to	6 Months
Fertilizers and their uses.....	6 Months
Eliminate Weeds and Foreign Grasses	1 Month
Disease and cures.....	4 Months
Supervision of Personnel	1 Month
Maintenance of Greens and Fairway	1 Month
Trees and Shrubs.....	2 Months
Making compost and topdressing	3 Months
Nursery	3 Months
Maintenance of Tennis Courts.	1 Month
Maintenance of Roads.....	1 Month
Spraying of Trees and Shrubs..	1 Month
Painting	1 Month

RELATED INSTRUCTION

Kinds of grasses
Analyzing of Soil
Difference in Fertilizer
Landscape Design
Kinds of Chemicals and Uses
Kinds of Weeds
Use and Care of Tools
Maintenance of Motor Equipment.

I believe there are hundreds of young men coming out of the service and wondering about some of the occupations they have heard about. All of us realize there are only a certain number of courses that have the equipment to train a competent greenkeeper. I believe we also realize that if we were to overcrowd this profession we would be doing it an injustice, for the simple reason that the overcrowding of any profession brings about a very bad condition. Therefore, in adopting a program such as this, greenkeepers would also set up the number of greenkeepers they felt should be trained in this industry.

Relation Between Nozzle Orifice, Pressure, and Speed For Large Scale Equipment

(The figures are based on information included in the mimeographed paper by Dr. W. A. Harvey, Botany Dept., Calif. Agr. College, Davis, Calif., entitled "Equipment for Spraying Weeds" Nov. 1945.)

Distance between tips on boom		Required discharge in gallons per nozzle per minute to deliver 200 gallons per acre at varying speeds								
		1 mile/hr.	4 miles/hr.		5 miles/hr.		10 miles/hr.			
12 inches.....		0.4	1.6		2.0		4.0			
14 inches.....		0.468	1.872		2.34		4.68			
16 inches.....		0.532	2.128		2.66		5.32			
18 inches.....		0.6	2.4		3.0		6.0			
20 inches.....		0.668	2.672		3.34		6.68			
Diameter of orifice in inches		Pressure in pounds per square inch required to discharge varying quantities (in gallons) per minute								
		0.4	1.0	1.6	2.0	2.4	2.8	3.2	4.0	5.0
0.039 in.....	±80									
0.046 in.....	>50									
0.059 in.....	—	100								
0.078 in.....	—	<50	±105	±170						
0.099 in.....	—	—	<50	±65	±100	±135	>170			
0.116 in.....	—	—	—	—	<50	±58	±75		±115	
0.147 in.....	—	—	—	—	—	—	—		<50	±68