

# Maintenance training bridges equipment knowledge gap

Golf course management enters a decade in which success will perhaps depend as never before on managers' knowledge of turf care equipment operation and maintenance. This article looks at a new program which could signal a significant approach in maintenance/operation training and favorably impact upon golf management in the years ahead.

Inflation, trimmed operating budgets and the need for energy conservation accompany the golfing industry into the 80's — a decade that will require new levels of end-user proficiency in turf care equipment, operation and maintenance.

One of the ironies of technological advancement is that while this produces generations of more versatile machines, it also widens the end-user's knowledge gap in regard to how to best utilize and properly maintain them. In short, technology outpaces education in equipment care. Another

factor contributing to the situation has been the priority traditionally given in college programs to turf care and growth. Turf managers were expected to have only a cursory acquaintance with the mechanical end of their business. Times have changed.

## On-Campus Program

Bridging the knowledge gap in equipment now on the market will be a major challenge facing the golf industry and manufacturers in the '80's.

An innovative response to the challenge took the form of the special turf care equipment training program held in June in Lake City, Florida by Jacobsen Division of Textron, Inc. Here, in conjunction with the Lake City Community College School of Golf Course Operations, the company provided its first ever on-campus training program.

Participating in the special program were golf course superintendents and mechanics from southeastern states,

plus the college's golf management students. Also taking part in the event were area distributors of Jacobsen turf equipment. The program focused on present day equipment operation and maintenance.

According to program developer, Ralph Sylvester, Jacobsen's manager of product training, "Equipment basics have changed markedly in a relatively short span of time. Notably, about 85 per cent of today's turf care equipment features one or more hydraulic systems which have replaced manual systems. As found in most equipment, hydraulics have given golf course superintendents and mechanics better control over cutting operations and projects. Unjustifiably, they have also often become the whipping boy in many equipment malfunction cases.

"Not many turf care professionals are fully acquainted with these systems," Sylvester explained. "Con-

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sequently, there's a tendency to blame them whenever trouble may develop. As soon as operators think a hydraulic system is faulty, they put equipment aside and call their nearest service technician or the manufacturer. The truth is, in many cases, equipment malfunction may be due to improper operating procedures, loose control linkage, a valve improperly adjusted, improper engine rpm or other routine maintenance items.

For the golf industry, Sylvester said that training's role should be to make operators and mechanics aware of the range of possible causes and how to handle them, adding that the majority of problems turn out to be minor and can be solved by the course mechanic, if he is adequately trained.

In the program held in Lake City, special attention was given to hydrostatic transmissions used on Jacobsen Hydro Turf Kings, F-133s, and Turfcats and Outfront Commercial rotary mowers. Eaton and Sundstrand hydraulic systems were reviewed, including operation theory, circuitry, testing and failure diagnosis. Lab sessions were used to verify test pressures and test points, with students shown how to use test equipment.

Besides hydraulics, the participants received hands-on instruction in Jacobsen H and F series turf tractors, classroom instruction in the operation and repair of a variety of equipment. Other subjects included grinding of reels and bedknives; general reel maintenance; small engine maintenance planning, diagnostic tech-

niques, failure diagnosis and tools; fairway and blitzer cutting units, including instruction in correct operation; the hydraulic system of a Greens King II, with emphasis on tracing the hydraulic circuits, valve operations, test instruments, etc.

#### Maintaining Primary Equipment

Another reason why maintenance is important to the golf course turf care manager is that he usually has only one primary piece of fairway or greens cutting equipment. This machinery has to be ready to meet cutting schedules at all times, if courses are to remain in best playing condition.

Given economic circumstances, the luxury of having back-up pieces of equipment is fast disappearing, placing the highest importance upon the reliability of the primary machine.

One more area which will receive greater attention in training programs is the practice of true preventive maintenance, which means more than just changing oil or equipment lubrication.

Establishing and following a formal preventive maintenance program was recommended at Lake City. Such a program emphasizes:

- 1) Keeping a written history of maintenance performed on all equipment.
- 2) Following manufacturer's recommended maintenance schedule.
- 3) Following manufacturer's instructions for correct operation of equipment.
- 4) Supplementing equipment main-

tenance knowledge by taking advantage of manufacturer-sponsored training programs.

Since Sunbelt states, with year-around growing and cutting, use equipment more than the north, maintenance in such states is a constant concern.

#### Reaching Students

The on-campus program was actually part of Lake City Community College golf course management students' curriculum. It may be that similar programs at other colleges will provide future course managers with important input on the mechanical side of their profession through increased emphasis on turf growing and equipment usage and maintenance.

It's also apparent that there will always be a continuing and growing need for training that helps mechanics to properly diagnose and treat turf care equipment performance symptoms. If training fulfills this need, then it will have made an important contribution to the golf industry.

Phillip A. Taylor, general manager, Jacobsen Service, summed up the program as follows: "We've witnessed the growing importance of the turf management instruction over the past decade. The growth has been accompanied by an increasing number of colleges and universities providing special programs in this area. In view of these developments, the need for manufacturers to provide practical intensive training in turf equipment operations and maintenance becomes much greater.

"What we want are better informed managers. This will result in more productive use and longer performance life for turf care equipment.

"In turn, this should lead to more efficient equipment utilization and valuable savings in time and equipment repair and replacement dollars."

In summation, the value of the above type of program for the golf management industry would appear to be considerable.

The success of such programs can easily mean the difference between equipment lying idle or performing at less-than-optimum capability and turf care machinery ready for service as managers require.

It can also substantially help to close the equipment knowledge gap more rapidly, so that both future generations of course managers as well as the practicing professional today can do their job better.



Ralph Sylvester, Jr. (right), manager, product training, at Jacobsen, explains operation of greens care equipment.