



Better Turf for Better Golf

# TURF MANAGEMENT

from the USGA Green Section

## BUSINESS APPROACH TO GOLF COURSE MAINTENANCE

The USGA Green Section conducted its sixth annual Educational Program at the Biltmore Hotel, New York City, on January 26. Excerpts from two of the papers were printed in the April issue and four more are on the following pages.

### *Simple Accounting Methods And Budget Preparation*

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Records, like paintings and poetry, can mean different things to different people. To some the task of keeping records is a breeze, to others it is a bore, but to the golf course operation records are a necessity! This is true because those charged with responsibilities of management are dealing with other people's money. In the normal course of events, the matter of budgeting is a joint committee-superintendent responsibility with the brunt of it falling on the shoulders of the latter. Basically, it is their joint responsibility to provide the very best golf course possible for a given amount of the membership's money. Like paintings and poetry, different people will interpret differently as to what can, or what should, be expected with this money.

Over the years there have been a number of fine surveys published on golf course expenditures. The undeniable fact is that costs are rising steadily due to several factors but primarily—

(1) The desire for the best playing conditions at all times.

(2) More golfers, therefore more play; golf will never be just a week-end sport again.

(3) Longer playing span; in the Northeastern area Labor Day used to signal the slow down of play, now Thanksgiving is more nearly the date most aim for.

(4) Rising costs of labor, materials, and equipment.

Each survey points up the fact that labor consumes 60 to 70 per cent of the annual budget. In industry since the production line techniques have been perfected, an individual worker may perform only one specific operation day-in and day-out during his entire work-life. However, in the golf operation, crews are necessarily small, and each man must perform numerous tasks daily. Because of this, and because every single job performed no matter how simple is important to the management record, a worker's time and duties should each be carefully recorded each day. The simple fact is that good records tell the management story for a golf course operation. These records can be as simple or as complicated as the individual cares to make them.

As a matter of reference to an uncomplicated system the following records of two veteran golf course superintendents

were provided the writer independently and these were then set together on one sheet for quick comparison purposes. The 18 hole summary was provided by Superintendent Riley of the Essex Fells Country Club in Essex Fells, New Jersey, while Superintendent Elmer Michael of Oak Hill Country Club in Rochester, New York provided the data for the 36 hole course. While slight discrepancies exist, in the main, the agreement in their figures is truly remarkable. At a glance it reveals what it takes in man hours to maintain a well managed course, what percentage of the total this is, and where the emphasis, if any, is placed in the management program in any given year. From this record, if further information is sought, any of these categories could be individually broken down to show every detailed operation that went into

making the total. If members wish to place more emphasis on any individual area this can easily be adjusted to their requirement. (See Chart)

The advantages of this simplified system are many but some of the main ones are:

(1) It deals in man hours and percentages for each category and so is easy for the committees to work with.

(2) Though the budget may fluctuate from year to year—the percentages should remain somewhat stable. Therefore the level of maintenance is placed up to the committee . . . no matter what the budget, these percentages will persist.

(3) It is easy to understand each general category—they are not complicated by detailed information. At budget time committees want primarily to talk

## Labor Distribution of Two Major Clubs

	18 Hole Course in New Jersey		36 Hole Course in New York	
	Hours	% of Total	Hours	% of Total
Greens and Approaches .....	2703	23	5170	22
Tees .....	660	6	1860	8
Fairways .....	881	8	( 3290	14
Rough .....	492	4	(	
Banks at Tees, Greens & Traps .....	348	3	( 2370	10
Bunkers .....	839	7	(	
Shop (Equipment repairs) .....	930	9	2300	9.5
Club Grounds .....	605	5.5	2140	9
Parking Area .....	108	1	325	1.4
Off Course (trees, hedges, pruning, spraying, planting) .....	682	6	1620	7
Pool .....	641	6	450	1.9
Misc. (green & tee nurseries, painting, bridges, roads) .....	453	4	1665	7.2
Drainage .....	44	.50		
Unproductive time (holidays, vacation, sick leave) .....	429	3.00		
Capital improvements .....	1653	14		
(Installed water lines in 4 fair- ways, constructed new bridges, new tee, and renovated 1 apron area)				
Tournaments .....			1120	4.8
Preparing compost .....			295	1.2
Tennis courts (3) .....			440	1.9
Hauling rubbish .....			160	.5
Maintenance of Water System .....			360	1.6
<b>Total</b> .....	<b>11,468</b>	<b>100.0</b>	<b>23,565</b>	<b>100.0</b>

Ed. Note: Hours expended will vary with regions, depending upon length of growing season, and upon the level of maintenance performed.

money—not management programs.

(4) From this record, it is a simple matter to prepare budget.

(5) There are no problems in fitting this system into any bookkeeping system.

All other records are relatively easy to categorize. These are primarily a matter of proper entry into the record book.

These include—

(1) Purchases

(2) Equipment—Inventory and Depreciation

(3) Basic data record showing course description—property boundaries, irrigation and drainage lines, acres of rough and fairway, size of greens and tees.

Records of this type are described fully in several articles published—and those particularly of our Pilot Study of Maintenance Costs—and subsequent articles on the topic, written by the Green Section's Dr. Marvin H. Ferguson, which appeared in the *USGA JOURNAL AND TURF MANAGEMENT*.

Complete records and budget information are necessary for several reasons—and I believe it is best summed up in the statement of one housewife keen in the way of budgeting who once said "records are necessary so that you don't wind up with too much year at the end of your money!"

## ***Keeping Up with Research is Good Business***

By **DR. MARVIN H. FERGUSON**

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**R**esearch continues to grow in size and in importance. In 1962, 16.5 billion dollars are to be spent in the United States. This is five times the \$3 billion spent for research in 1950. If research were considered an industry it would rank in the top 12. It employs 350,000 people. Government will pay two-thirds of the cost of the research done in 1962, but 75% of the work will be done by industry under government contract.

### **Type of Research**

Much of the government sponsored research is of a basic nature. It deals with all aspects of physical and biological science. Ultra-high temperatures, cryogenics (extremely low temperatures), direct energy conversion systems, light qualities, etc., are some of the areas where much effort is being expended.

Discoveries made in basic research may have no preconceived application, but as facts become available they can be pieced together to improve our knowledge and technology. Such discoveries can be applied in many areas of biological science, and so while the nation's space effort may be the prime reason for research of this magnitude, the bonus values that result from it may even provide us with additional knowledge for growing better turf.

### **Where Does Turfgrass Fit In?**

This background will indicate that our concern with turfgrasses represents an infinitely small effort when compared

with the total research expenditure. However, our opportunity to learn new facts is not limited by our own small efforts because of the fact that we can borrow from the large reservoir of basic information.

We are going to need all the new information that we can acquire. We shall be faced with new problems. An example is the new stadium to be built in Houston for use of the Houston Colt .45 baseball team. The stadium is to be dome-covered and air conditioned. It appears that light will limit the growth of grass. Supplemental light can be supplied artificially, but such light generates heat, thus increasing the refrigeration load.

Even though our part in the total research effort is comparatively small, it may be considered big in absolute terms, and the job of keeping up with progress is a big one. Presently \$550 million a year is being spent for agricultural research. Fifty-two per cent of this is by industry, with the remainder being done by federal and state governments and by non-profit organizations. There are more than 9,000 pesticides on the market today for controlling insects, diseases, weeds, nematodes, and rodents. Two years ago there were only about three pre-emergence crabgrass controls on the market. Today there are more than 20 and this is just the beginning.

Basic research on the activity of