

Great Golf Courses of America

— Their Maintenance Crews and Equipment

PANEL MEMBERS: Lloyd T. McKenzie, Superintendent, Augusta National Golf Club, Augusta, Georgia.

Richard M. Malpass, President Golf Course Superintendents Association of America; Superintendent, Riverside Golf and Country Club, Oregon.

MODERATOR: W.H. Bengueyfield, Western Director, USGA Green Section

Bengueyfield: Someone once said, "We are only as good as the people we have working for us." To put it another way, "An 'average' maintenance crew begets an 'average' golf course." Certainly the condition of any course is a direct reflection on the superintendent. What makes a good maintenance crew in your opinion?

Malpass: Men or women who know their job, are conscientious and capable. Individuals who give a dollar's worth of work for every dollar paid them. They should be courteous to golfers, take good care of their equipment and be proud of the job they have done and are doing.

McKenzie: A good crew should be carefully screened and hand-picked by the superintendent. They should have previous training or at least have the ability and the willingness to learn. If you find you have made a bad judgment in hiring a new employee, you should dismiss him before he damages the course or has a bad influence on other crew members.

Bengueyfield: How do you hire a new man and how do you train him?

Malpass: I always interview a new employee as well as have him fill out an application for employment. I try to find out as much about him as he will volunteer during the questioning. I try to determine his motivations: why he wishes to work for us and how he feels about golf course work. I often check references. As to training, one of the first things I give a new employee is an orientation map of the golf course. Then, he either works under my direct supervision for a time or with one of my more responsible employees to learn his new job. He is informed of company policies, wages, vacation, and any of the other items a new employee should know about.

McKenzie: Whether employees are new or old on the job, a continuing educational program for all seems essential. Working conditions and fringe benefits are important in maintaining good morale. If an

employee is happy with his work and takes pride in it, the course will just naturally be in better condition. I feel it is very important to retain key personnel on the maintenance crew on a year round basis.

Malpass: It is also important to keep your people well informed. We get enough surprises in life without compounding the problem by withholding important information on tournaments, special functions, club policy, etc. from the crew. I always pass along the compliments I receive on the conditions of the course and let the crew know their work is appreciated. Compliments are morale builders and the maintenance crew need them and deserve them. All too often, we work our hearts out to provide a beautiful facility for a golf tournament and not one word ever reaches the crew as to the good job they have done.

Bengueyfield: Is there really a difference between maintenance crews on great golf courses as compared with perhaps ordinary ones?

McKenzie: Great golf courses usually demand a higher quality of work from the employees and superintendent. Not that employees on other courses cannot do the work, but their superintendent is often limited by the number of manhours he can devote to the perfection of any one job. One thing great golf courses have over most courses is the necessary funds to do what most courses would like to do. There must be sufficient personnel and equipment to maintain a course at an expected level. It is up to the superintendent to justify his needs.

Bengueyfield: Would you then recommend a large crew at minimum wages or a smaller crew at competitive wages?

Malpass: I was too many years an employer with my own large farming operation to answer this question in other than just one way. I want good men. I want to pay them competitive wages, and I will get more and better work done with fewer employees. I continually evaluate my people. If there is something I see that they need to know, or if I can help them



Metropolis Country Club, New York, and the dog leg sixth hole.

perform their work more efficiently, I tell them. If they are doing a good job I tell them. Some type of an evaluation program is an important tool for golf course superintendents to use in developing their crews to the fullest extent.

Bengeyfield: What about crew organization? How is your crew organized?

McKenzie: I carry a basic crew of about 16 men for the 27 holes at Augusta National. During and preceding the Masters Tournament, as well as during the summer when the course is closed but heavy construction may be underway, I hire additional men. But a normal daily program during the playing season may be as follows:

- 1) Green Mowing—I use seven men approximately 2½ hours a day to mow greens with walking mowers.
- 2) Tee markers and cups—Two men are used to move cups and tee markers. In addition, these men patch all tee divots with dyed dirt and seed mixture.
- 3) Fairway mowing—Two fairway mowers are used and each man carries a box of dyed green dirt to repair any areas that may be damaged while mowing. During the growing season, fairways are mowed almost every day.
- 4) Fringe mowing—Two fringe mowers are used almost daily to mow fringes during the growing season.

5) Tee mowing—Tees are mowed daily with a triplex greens mower.

6) Bunker maintenance—We have two men working daily in raking the sand during the busy season. We use approximately 556 tons of bunker sand each year. At the beginning of each season, most of the sand is replaced and even during the season the dirty sand is removed and replaced with fresh sand.

7) Course cleanup—I have one man who cleans the golf course almost continually during the playing season. He takes care of such things as picking up pine cones and other debris, raking straw, and repairing all damaged areas he finds anywhere on the course.

Augusta National has three men that have been with the club for 30 years; six men for about 20 years; four men for 10 years and three turf school graduates for about a year and a half. I believe crew stability is an important factor in good golf course maintenance.

Bengeyfield: If a golf course must have a limited crew, what jobs would you recommend for top priority?

Malpass: Those jobs that directly influence play. This means greens must be mowed frequently—daily if at all possible. Tees should be closely mowed and often. Fairways should be mowed several times a week and again at a close cut. Tee markers and

cups should be changed daily and irrigation levels must be closely watched to avoid overly wet conditions. These would be my priorities.

Bengeyfield: Why is it one superintendent will receive only a minimum effort from a crew while his replacement will receive a maximum effort. In other words, what are the responsibilities of a golf course superintendent in developing a sharp, efficient crew?

Malpass: This question can be answered with a quotation: "The successful manager of men derives his satisfaction from achieving with people. He takes real pride in surrounding himself with strong people and in helping them achieve. He recognizes that in a world which is changing economically and socially and which is accumulating technical knowledge rapidly, he and his people are confronted with the need to cope skillfully with these changes. To keep his business competitive in an everchanging society, he holds a very strategic position. Helping his people grow with the times is his opportunity and his challenge." Another quotation I like is: "A good executive is a man with a sense of urgency, a demand for excellence, and a healthy discontent with the way things are."

Bengeyfield: What about equipment on the great

golf courses of America? What is the most valuable piece of equipment on your course?

McKenzie: I have found the most satisfactory approach to equipment operation is to have each man assigned a specific piece of equipment for his use. Each greensman has his own assigned mower and he mows the same greens each day. The same fairways are mowed by the same man each day. By following this kind of pattern, each man is responsible for his equipment as well as for the job it does. It is important to maintain equipment in top condition and to replace it when needed. This is especially true for that equipment used most often and on the most critical areas of the course such as putting green mowers, fringe mowers, tee and fairway mowers.

Malpass: As to the most valuable piece of equipment on any golf course today, my answer would be—a pencil! In these days of ever-increasing costs, higher taxes, higher rates for labor, a good superintendent needs to examine every avenue to achieve maximum results with the resources at hand. He must be on top of new technical advances in his field. He must read his professional publications and he must attend his local, regional and national meetings. He must keep up or be lost in the dust.

Great Golf Courses of America

— Their Irrigation Systems

Panel Members: Joseph R. Flaherty, Superintendent, Baltusrol Golf Club, New Jersey

Carlton E. Gipson, Director of Golf Courses, The Woodlands, Texas

Moderator: Stanley J. Zontek, Northeastern Director, USGA Green Section.

Zontek: To start things off, would you tell us about the type of irrigation systems at your course?

Flaherty: Baltusrol is located in New Jersey and we have predominately bentgrass fairways, tees and greens. We have an automatic, electric, two-row system with master and satellite controllers. Our main lines are of asbestos cement pipe and 99 per cent of them run through the rough areas with plastic lateral lines into the fairways. The polyethylene lateral lines are only under pressure when the sprinklers are operating, but the asbestos cement main lines are always pressurized. On our 36 holes, we have 46,000 feet of asbestos cement main line and roughly 250,000 feet of polyethylene lateral lines. We have four deep wells plus a connection with the local water company. When we need it, we can obtain 500 gpm from them. In all, we have

available, 1,200 gpm for our two golf courses. We can cover from tee to green in a 12-hour cycle. Greens are never watered at night. They receive irrigation in the morning hours and always after they have been cut.

Gipson: Texas is bermudagrass country and we use 690 heads in a two-row hydraulic system. We have Tifdwarf greens, Tifton 419 fairways and common bermudagrass roughs. We have PVC pipe and a pumping station with a capacity of 1,300 gpm. We can irrigate the entire golf course in eight hours.

Zontek: What is your basic irrigation schedule?

Flaherty: I'm sure there are basic schedules for every part of the country depending upon climatic conditions. However, our regular night schedule calls for the operation of 33 valves (66 sprinklers) on half-hour shifts. During periods of high tem-