well. They do an excellent job. Either concave or convex construction will carry water away from critical playing areas.

Snow: Curbing also helps in this regard. In fact, four- to six-inch curbs help keep carts on the path near tees and greens. If the back side of the curb is leveled off with soil and grass is encouraged to grow here, it is easy to maintain with a regular mower. Hand clipping will not be necessary. Carts remain on the path, and worn areas along its side are greatly reduced if not eliminated.

Brewer: As grass growers, perhaps we can do more to encourage grass to grow on heavy traffic areas. For example, choosing the right grass, adequate aeration, fertilization, irrigation, etc. Once the turf shows signs of wear, you must raise the maintenance level in that area or divert the traffic or put in a cart path or road.

Moncrief: According to Dr. Glenn Burton, of Tifton, Ga., some of the hybrid bermudagrasses are withstanding traffic better than common bermuda or other types. I believe plant breeders are developing more wear-resistant grass varieties. The improved perennial ryegrasses also illustrate the point. Buchanan: Gentlemen, it seems we all agree that, as cart usage increases or is concentrated in particular areas near greens and tees, the need for some kind of path or roadway also increases. The degree of wear depends also on what type of soil you have, the type of grass, the management of it and the climate of the area. Carts are especially necessary if the course is frequently played under adverse weather conditions.

Up to a point, the "scatter" principle, or "roam at will," seems to work fairly well on fairways. But with increased cart traffic and increased maintenance costs for repairs, certainly there should be income enough from cart usage to pay for turf repairs and cart path installations and upkeep.

As to the control of carts and their ownership, control seems best achieved if it is in the hands of the club or professional. By control I mean the granting of permission to use the cart on the course on any given day and in maintaining proper tire size, tire inflation and etiquette in cart use.

The golf cart problem may always be with us, but I thank you gentlemen for contributing to a better understanding of it and the use of cart paths and roads.

The Invisible Men

by FURMAN BISHER, Sports Editor, Atlanta Journal

The biggest subject of gossip around any golf course is not the pro, not the nifty feminine member behind whom all the panting male members want to play. Nor the sandbagger with the 18 handicap.

It's an invisible man. You know he's there, but you never see him. He might have lunch at the next table in the men's grill, but you wouldn't recognize him.

He's a kind of Santa Claus with a green thumb. He works while you sleep. You go to bed at night and wake up the next morning to find that he has achieved wonders.

He probably couldn't break 100. It's possible the only club he ever swung was a pick. (That's a No. 2 club in your gardening bag.)

The spring breaks, the greens are like parlor rugs, the fairways look like long verdant hallways through the forest and the rough is but yet only tender sprouts, all the members go about cooing, "The course is in the greatest condition I've ever seen." They're talking about the Unseen Man with the Unidentifiable face.

The winter has been rotten. The course a bog from rains that turn the fairways to ponds and the color to brown. Greens are patchy. Bunkers have washed. April comes and the course looks like Sulphur Pits 9-Hole Municipal Links—though it's 1,000 miles from any ocean—\$1.50 a round. You curse him. You're not sure who, but you curse him.

You've never met him socially, but you invite the Lord to join you in bringing down an avalanche of wrath upon him. Your putt hits a patch of poa annua, you assail his parentage. Your drive hits a sign that says, "No Carts Today," you demand an immediate face-to-face with him.

You discover that he is real. Flesh and blood. A very tranquil man with cool, clear eyes, and in condition to swim the rapids—upstream. Chances are, he wouldn't know a Calcutta from a church bazaar. But he knows grass, and how to grow it. Basically, that's his business—grass-growing, and barbering it.

Mostly, he's referred to as "the greenkeeper," a rather pleasantly bucolic term. As a group, they refer to themselves as "golf course superintendents." They have a national organization called "Golf Course Superintendents Association of America." They didn't get off some hay mow and come to town. They study for it, and they're as devout toward their duty as monks.

They don't wear bib overalls and dip snuff.

They use words longer than some of your putts. One of the topics at their annual convention this year will be, "Turf Management: A Synergistic Approach."

That's one you don't hear being thrown around the locker room, or over the gin table.

Golf was moving across the ocean in the 1920s, and Edward J. Casey decided to move with it. He was an engineer's apprentice in London, had fought World War I with a wrench and caliphers, repairing His Majesty's military rigs. Some of his cronies had turned to this golf, and he went with the crowd.

When he arrived at the Baltusrol Golf Club, near Springfield, N.J., in 1945, Ed Casey had learned his trade by rote at three other clubs, and put on the finishing touches in agronomy classes at the University of Massachusetts. He was officially a Course Superintendent, and his address was one of the classic addresses of golf in the USA.

There are good greenkeepers, and there are those who should be mucking stables. Some are Ed Caseys, good men of exceptional judgment, hard, steady hands, and acutely aware that you can't rush Nature. You can nudge it along, but don't hurry it.

His career in the USA has covered everything, from the primitive times when greenkeeping was done, virtually, with a fork and a spade. It's such a science now, grasses are afraid not to grow.

"When I got to Baltusrol," he said Friday at lunch, "sheds were filled with tobacco dust. That was our 'insecticide.' It was supposed to be the cure for everything. It wasn't worth a damn."

Then there was the Arsenate-of-Lead Era. "We

Speakers at the 1977 Green Section Conference in Atlanta included (left to right) Joseph C. Dey, Jr., Lloyd MacKenzie, Tom Marquoit, and Richard Malpass.



loaded the course with it," he said. "It's a wonder half our members didn't die of lead poisoning."

Casey has prepared Baltusrol for four U.S. Golf Association championships, including two Opens. He did it so well the last time, Jack Nicklaus broke the Open record on his handiwork. After that Casey retired. No connection. It was simply time to go. The year was 1967.

It isn't a romantic story, the legend of the greenkeeper. Rife with chinch bugs, army worms, digger wasps, drought, flood, fungi and members who won't repair ball marks. But without these knights of the maintenance barn, golf is a bogey.

Ten years later, the USGA called Ed Casey before its convening body and saluted him. He was presented the annual USGA Green Section Award for distinguished service to golf through work with turfgrass.

He was the fifth superintendent to carry off one of the plaques. It wasn't simply for Ed Casey alone, it was for all the Good Ones. So, on your feet in the men's grill, and hoist your cup to them. God knows where we'd all be on the weekend without them. Probably mowing the lawn.

(Editor's Note: Mr. Furman Bisher is the Sports Editor of The Atlanta Journal and wrote the above article for that paper on January 30, 1977. It Is reproduced here with his permission and our thanks. It is a tribute to Ed Casey and all golf course superintendents.)

Also speaking in Atlanta were Dr. Glenn Burton, James Gabrielsen and George Brodnax III.

