I am sitting in my office after all the preparation for another NFL game. Last night, the Indians had a game, so all the necessary changeover work from baseball diamond to football field had to be done in short. Many men in a position like mine supervise this type of work, year after year, and we all look for easier and faster methods to improve our work and the quality of the fields.

Trainors now use magnetic imagery, electrical therapy, coaches use videotapes, catalog the recorded information in a computer, and are able to find a certain player under a particular set of circumstances. Split-screen images are used to compare the way baseball players swing the bat. Even ticket sales are completely computerized, with built-in factors to fit crowd size to event, while simultaneously selling tickets at sites around the city. But unlike these and other special disciplines in the sports business, the methods and equipment used by ground crews had not changed until fairly recent times.

The last five years in particular have seen a great improvement in ground keeping techniques and sports surface quality throughout the country. Artificial surfaces have finally been recognized as having a place, but not as the best sports surfaces. We are seeing more professional facilities go back to grass, and improved grass growing techniques are helping that to take place. Groundskeepers should take advantage of this change, and upgrade their thinking into the 1990s.

The ground crew at Cleveland Stadium numbered more than 20 when I arrived in 1982. We now operate with five full-time employees and 10 part-time employees for games and special events. They are all Teamsters. Although I am in charge of the field, I must say that the conditions of the field, good or bad, are a result of the cooperative efforts of my ground crew.

My theory has been to have fewer men on the ground crew and provide them with the ability to make a good living. In the past, we employed large numbers of men, but few of them could make a living working on the ground crew alone. The average age of our crew member has risen, which makes it important for them to have medical benefits and enough income to raise families.

It is important to teach good operation techniques, to provide the latest efficient equipment, and give crew members the opportunity to learn operational skills. I also try to teach the management skills they may need if they leave for another job. My crew is exposed to budget, pesticide programs, and planning sessions. They need to understand the "whys" and "ways" that affect decisions. I have found that their attitudes improve when they understand the reasons we must do certain tasks and what that activity will mean to the company or team. I like to put different people in charge of special projects, and let each take pride in its completion and success.

From a management viewpoint, equipment can be depreciated and written off as a cost of doing business. Equipment does not petition for unemployment, need hospitalization, or complain about management decisions. Therefore, I will replace large numbers of unskilled manpower with skilled operators and quality equipment every chance I get.

When I started, the ground crew had no equipment experience. The policy then was for the head groundskeeper to run all the equipment that was rented, or bring in outside contractors for bigger jobs. Today, all full-time ground crew members can operate all of our equipment, from transits to aerifiers. This makes each employee a more valuable asset to the company. There was also a time when we rented necessary equipment. Thanks to the support I get from the company, I can buy that same equipment if the usage I will get from it will save money in the long run.

As a result of this program, we are probably the best equipped stadium in the country. We are able to attack any problem immediately, which makes us a more successful operation. Our operating costs have also been decreased significantly as we acquired equipment.

In the 10 years that I have been associated with the stadium, we have added better paint spraying techniques, geotextile, flat-backed Enkmatt, pregerminated seed, the latest in grass maintenance equipment, and a tarp roller. But I must say that there are still many jobs that cannot be done by machines as well as they can by hand. Working with mound and infield dirt, for example, requires special attention that machines cannot always give. No machine can paint a line as well as a brush. It is important to look at each task and evaluate all the methodology to get the job done.

Our tarp roller has an interesting story. In 1983, I attended an NFL meeting concerning field conditions. The meeting was hosted by George Toma in Kansas City. His crew demonstrated tarp covering techniques and we were also able to see their equipment. George had some innovative machinery, as well as creative ways to deal with problems on both natural and artificial fields.

On the way home, I kept thinking that there had to be a better method for rolling tarps, one of the most difficult yet important jobs. Tarps are still used to protect field surfaces from too much rain or snow. Timing is the most crucial part in covering these areas. Sun on a covered field is certain to burn the turf, but if you...
All full-time ground crew members operate all of the stadium's equipment.

cover a field too late after it rains, then turf will not dry. Covering during a game is a matter of timing with the umpires to get most of the game in without losing the field to wet conditions.

The average tarp weighs about a ton and the rolling drum can add another 1,000 pounds. We work with the football tarps on a daily basis to protect the field until the team is out of competition. Any mistakes in decisions on covering can jeopardize either the game or the field conditions. We would employ up to 25 men to roll the tarps on game day, but only needed eight men for the rest of the work.

Tom Aldrich, an ex-golf course superintendent, wonderful mechanic, and a creative man was the person I went to with my tarp idea. Together, we built a prototype machine with wheels to push against the tarp drum. I discovered later that other people had also done that, and they found, as we did, that the tarp would slide under wet or icy conditions. Tom suggested that we power the wheels to get the tarp to turn. With the help of Ed Green, an engineer, we developed a system that would turn the drum, not tear the tarp, and let each wheel work independently.

The success of the tarp machine has been very exciting to me. We now can roll tarps with one man instead of 12 to 20. Other stadiums have also started to use this piece of equipment; however, what has been most interesting in talking about the machine with groundskeepers is how some will not accept a better way to deal with something.

One prominent groundskeeper told me that he is an honorary member of the union his crew belongs to, and he would not let a machine take their place. Another stadium manager told me that they get cleaning people or ushers to help with the tarps. I guess they do not realize that those people are not doing their intended jobs if they are helping with the tarps. There is a case on the books of an usher getting hurt while helping roll tarps, and the club will be paying his disability for years to come. One field manager even told me that a tractor is never allowed on his field, which is hard to believe in the days of triplex mowers, sprayers, and aerifiers. It's hard for me to imagine that a machine that can save money, make the job easier, and improve the quality of the field is hard to sell.

I have been involved with the acceptance and usage of a water removal machine that was developed in Australia. This machine, now produced by Kuranda, provides a great way to deal with excess water. It can remove thousands of gallons of water without damaging the turf. The same machine is being used on synthetic turf. We use it for tarp dumping and uncontrollable rain problems. If I save one game, that will pay for the machine.

If we did not have any problems they would not need me (probably the last person in the rural town where I live to use an automated teller machine), and solving problems is a great part of the job. I realized that it was necessary to improve my techniques and upgrade the level of maintenance at Cleveland Stadium. I had the advantage of being involved in the golf industry, which is very competitive. The condition of the course has everything to do with the amount of revenue it is able to take in. Stadiums do not have that kind of competition. Until television, a comparison of field conditions was made to the public through the eyes of the radio announcer.

The first direction I followed was to was to utilize many of the turf maintenance techniques used in golf. Our computer gives me great record keeping ability and makes budget planning a snap. I can now access a weather program to help plan each day and event. The most important thing I do several times each day—something that has never changed—is inspect the field.

Driving tractors, using computers, calibrating Dial-A-Grade laser levels, inspecting the turf fungus—all of these have become jobs for the groundskeeper of the 1990s. What has changed the least is the success the players have in hitting that little white ball with a piece of wood.

Editor's Note: David Frey is the director of field maintenance for Cleveland Stadium.