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MOWING, AN IMPORTANT CULTURAL PRACTICE ON THE GOLF COURSE

One basic premise that I have to remember in greenkeeping is that golf turf is truly a specialized turf, grown artificially for golf. It in no way resembles the turf in a lawn or any other plot of turf. It is different because it goes through the day to day stresses of cutting, play, disease, insects, wilt, and excesses of water. Between the evils of Mother Nature, the wear and tear of everyday golf, and the ensueing day to day maintenance, even the temporary cures that we apply to solve problems cause stress by themselves. We, as growers really have to be on our toes to keep the golf course near-perfect each day, each week, and each season. We have to mold cultural programs that will work for us each day and be compatible with each season. Growing healthy turf first, and taking care of it after establishment, is the key to good cultural practices. They include mowing, watering, fertilization, disease control, and insect control. Auxiliary cultural practices include aerification, vertical mowing, top dressing, rolling, drainage. Done properly, cultural practices will indeed minimize most extremes experienced in turfgrass maintenance. Each required decision making and proper timing since they may vary from day to day and season to season.

Mowing is a number one area in our work since most of our time and financing goes toward this area of turf maintenance. We are experts in this because we know of the importance of mechanical upkeep, timing, height of cut and frequency. Proper mowing minimizes secondary problems associated with the upkeep of the course. It is not just the method of removing top growth. Cattle do that, too. It is the method of mechanically maintaining the turf surface. Turf is a special plant because over the years it has devised its own adaptation in growth for having its foliage removed. It has low growing points and it stores reserved food in its stolons, rhizomes, and roots, thus enabling the turfgrass to give itself new growth after defoliation. The following list tells us what happens to the turf when we cut it:

1. reduction of the leaf surface
2. temporary sessation of root growth
3. top growth is stimulated
4. the ratio of top to bottom is reduced thus lowering carbohydrate production and storage
5. competition between small and large plants is reduced
6. shading of lower leaves is reduced
7. a port of entry for disease-causing organisms is introduced
8. as older leaves are removed, remaining leaves are younger and less mature
9. water loss from cut ends is temporarily increased
10. species tolerant to mowing are favored over those not so tolerant
11. soil surface temperatures are more extreme

Therefore, given this group of happenings, and given a certain day with weather conditions, we have many management choices when it comes to mowing.

1. The height of cut may vary at the beginning of the season, during the season, during periods of extremes and again at the end of the season.
2. Frequency of mowing depends on the time of the year and daily weather conditions which dictate

whether we should mow at all, every day, or every other day.
3. When to mow can be altered by heat stress, morning dew, and so on.
4. Type of equipment can be an alternative from day to day and again from season to season.
5. Collecting clippings can be an advantage in some instances or it may work to a disadvantage in the long term.

If the affects of mowing really do reduce carbohydrate reserve and production, I am sure most of us would admit that we do not think of cutting turf in these terms, as part of our daily routine. This is why I believe in one of my "Leuzingerisms", a basic philosophy. "Greenkeeping is not a science, it is an art." Day to day decisions we make are not based on scientific data that we collect, but they are based on visual inspection and feel of the course each day. The first thing we do when we go to work is decide what needs to be done. Are the greens going to get cut, should we let carts go today, is there an outing to schedule around, was that watering on the greens or fairways enough, and will they require additional water tonight? This is what greenkeeping is all about. If greenkeeping is not just a science and is an art in growing, there have to be certain pre-requisites to become a qualified golf course superintendent. A greater appreciation of the game of golf is a must, both in the art of greenkeeping and in meeting the needs of the golfer. Technical ability in the upkeep of machinery, drainage, and personnel relations are but a few examples in the art of greenkeeping. Experience in this business is the door that opens for the patient learner. Success is measured by more than one or two good seasons in a row for the person who stays in this business.

When it comes to day to day maintenance practices, I believe in another "Leuzingerism" or basic philosophy. That is, "there is probably more than one way to do the greenkeeping right, and one way to do it wrong". The way you choose may be different, but just as successful. Let's take a hypothetical problem: If we are in good growing weather and we have had a nice rain during the night, we will probably check the golf course for conditions before we do anything else. Depending on the amount of moisture in the ground we might be faced with several options.

1. Do we cut now or give the greens a day of rest?
2. Will they dry out enough by 11 o'clock so that we can cut ahead of the afternoon play? This may be an inconvenience, but one that will pay off if conditions are right at 11.
3. If things are not right at 11, it may be necessary to bring some of the helpers back in the evening and cut them ahead of the next rain storm. This is really an inconvenience, but very important if conditions dictate.

Nother Nature can be our biggest bug-a-boo. This is why cutting in extreme conditions has to be a number one management decision each day of the season. Inconvenience is not a good enough excuse for making the wrong decision for cutting. The feeling of accomplishment derived from making the right difficult decision far outweighs the convenience of the matter-of-fact, lackadaisical method of just sending the crew out to cut greens and fairways on an extremely wet or hot day, just to keep them busy and out of our hair. The problems of self-inflicted, injured turf from cutting at the wrong time usually causes more problems and more days for worry and concern.

The Chicagoland area is experiencing problems with C-15 turf on the greens. No matter what the problem, whether disease or genetic, we as golf course superintendents better baby those turf areas with the problem. No matter what fertilizer regime and fungicide program we have, if we predispose that turf to cutting stress, we have opened the door for additional problems that can and often are irreversible. Only the strong survive, and that is our job, to keep it srong, and at the same time, offer the best possible golf conditions.