Weather Forecast As Course Work Control

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It seems a bit presumptuous to write about forecasting weather conditions when the majority of the readers will be golf course superintendents. Every superintendent is known as "the best weather prophet in the county" and is the fellow the golfers ask—"Will we have good weather for the tournament?" Yet when I think of my own experiences with the weather and realize how important a factor weather is in the growing of fine turf, I feel that a reminder that some of these "weather sharps" are not taking advantage of their knowledge, may be helpful.

Some 30 years ago, after losing out on 3 successive attempts to dry hay, I purchased a good barometer. A few days later the opportunity came to cut some more hay. The weather looked favorable as far as I could see. The barometer said rain was due,—having paid \$20 for its judgment, I did not mow. It rained within 10 hours. Then and thereafter the barometer has paid big dividends. A well made aneroid barometer correctly adjusted to its location can save many dollars of the course budget.

"It is 2 hours before quitting time and what will I do with the men? If it doesn't rain tomorrow I want to topdress the greens, yet I don't want to screen the soil and have it get wet,—it looks as though it might rain". Similar uncertainties frequently occur at golf courses and the result is too often an ineffectual or even wasted 2 hours because of the lack of decision by the superintendent. The weather is the factor. Prophet or not why not take a look at the barometer and say, "We'll screen the topsoil, it's not going to rain". A good barometer correctly interpreted will seldom let you down.

Fertilization Guide

"Our superintendent applied a well known organic fertilizer to the greens 4 weeks ago. No results. Thinking the fertilizer was not good he applied a second dose 10 days later. Just a very little greening of the grass occurred. Still disgusted with the fertilizer and wishing to get rid of it, he made a third application 5 days ago. Today I had to send for an expert to come and look at the greens, they are awfully sick, yet growing faster than we can keep them cut." Well, from the time of application until 4 days ago the weather forecast had been either fair and cool, or cloudy and cool. Then it changed to warm with showers. The wasted time, plant food, high blood pressure, unfavorable comments and prestige were very costly. Again the weather was the factor, but not at fault. Organic fertilizers must have warm weather and moisture to become effective. Incidentally it took 8 weeks for the greens to get over their spree.

"It has been the custom at the Hirum's Horrible Hump Club (new name just ac-quired) to mow the greens very short daily, except Sunday, throughout the season. The greens have always been rather poor in the fall but look at them now and it is only August 10th. They've fallen off in the last 10 days in spite of an application of nitrogen". Certainly the weather had some-thing to do with it, but it was not the cause. Omitting the factor of height of cut which was also governed by man, man failed to consider the weather as it came daily or was forecast. The last 6 days of the 10 were cloudy, 2 very cloudy. There were only a total of 21/2 hours sunshine. The radio, the newspaper predicted the cloudiness. The barometer would have forecast it if there had been one. Grass cannot grow blades that will function well without some sunlight. The less sunlight the more blade is necessary to even keep the "factory" in operation, with no production. Fourteen labor hours were required for each mowing of the greens. Evaluate the labor hour cost and production loss against the labor hour use to a better advantage, and the improvement in the health of the grass, had the mowings been omitted during some of the dull days. This accumulating loss becomes enormous at the end of a season.

"We've had 15 hours of hard rain and my number 12 and 18 greens are wet down only 2 inches. Smart, the superintendent at the club in the next town, says his greens are wet down 4 to 5 inches and they had less rain than we did. They have the same kind of grass as we do. I've told the committee we ought to re-build these greens." Regardless of the fact that the greens may need rebuilding, (there is doubt if they do) the superintendent could

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Weather Forecasting

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have saved much of the rainfall if he had paid attention to the weather. A look at the facts show that these greens have a thick mat of sponge-like roots and un-decayed vegetable matter. The rain was forecast in ample time to have the greens watered enough to be in condition to absorb a large part of the rainfall. The run off is very great when a large quantity of water is applied to a dry surface.

Three Kinds of Weather There are 3 kinds of weather for the golf course superintendent. Regional weather is that weather that includes the section of the country or an area of 2,000 sq. miles. This weather influences the barometer and may be depended upon to have a general effect upon vegetative growth. Local weather covers a much smaller area, perhaps only a few sq. miles, and frequently does not influence the barometer until the storm arrives. Thunder storms are often of a local nature. The third weather type is what I call very local. It covers a few thousand sq. ft. (to the entire golf course) and is the result of surrounding physical structures, as buildings, mounds of greens, woods, ponds, contours, slopes and similar factors.

The very local weather is much more of a temperature and light condition than of rainfall. Rain will fall everywhere, but the



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wind won't blow (as hard anyway) in the lee of the back slope to a green, or woods. Desiccation is greater on top of a slope than at the bottom if both are exposed to wind. Weather on a north slope is less changeable than on a southern exposure. All very local weather is constant in its relation to local and regional weather. (Once the relationship is established very local weather is easily forecast.) These relationships should be observed and determined by thermometer, then recorded and used. The very local weather can be changed by man to be helpful, examples are to limb up trees, remove brush, or place brush or snow fences.

Regional weather is picked up by a good barometer from 10 to 14 hours or at least several hours before it appears. Nothing can be done about it and for the most part it is helpful whether it is actually used as a help or not. If the forecast is for adverse weather conditions, the resultant cost can be lessened, and if favorable weather is forecast much advantage can be gained.

The foregoing has only touched on the subject of weather and its influence on golf course management. Remember there is weather in winter as well as summer, and it is there for the superintendent to use, free of charge. Weather is easy to blame but it may blow back or make you appear "all wet". With the shortage and high cost of labor, materials and equipment, a golf club cannot afford to miss any opportunity offered by the weather.

Maintenance Building

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and the compost, fertilizer and other storage in still another. I would prefer to have it one building, in order to have all the various inside operations such as repairs, screening compost, etc. in one place.

If I were to build a new building, I would prefer it of wood; a long, rectangular, one story building. The sections for office, employees' lockers, repair and paint shop would be well insulated, heated, have running water, and a wooden floor, rather than concrete. The garage would have concrete floors and doors on both sides as mentioned before. The remaining storage spaces would have concrete flooring but with doors on only one side.

I have not attempted to give any actual costs or dimensions as they will vary with the locality, type of material used in building and amount of equipment, tools and materials necessary for the upkeep of your golf course, and if given would be suitable for only my particular course, not yours. Rather I have tried to give you a few things to think about before you construct a maintenance building to suit the needs of your golf course.