

MONITORING IRRIGATION SYSTEMS

With the introduction of the computer, many more tools can be used by the superintendent to ensure efficient irrigation. These tools can be used to determine how much water to use as well as signaling when something within the irrigation system is not working properly.

One of the most popular options now being utilized is the weather station. The primary purpose of the station is to provide weather data measurement in order for a computer program to calculate an ET requirement. Typically a weather station will have a rain gauge for measurement of rainfall so that irrigation cycles can be canceled or adjusted according to the amount of effective rain. For example, if we get 1/2 inch of rain in 10 minutes, much of the water will probably end up as runoff, therefore we may still need to irrigate- just not as much as before the rainburst. Solar radiation sensors and relative humidity sensors measure two more factors that are critical to the calculation of ET. An anemometer is used to measure wind speed and is used with a wind direction indicator to provide information on wind movement on the golf course. A temperature probe is just a thermometer capable of sending information back to the computer in language it can understand. With some control systems, the rain gauge and temperature sensors can be attached to controllers out in the field. This way, even if you don't have a weather station, you can generate this information and have it sent from the field back to the central so that you can get more accurate readings for ET calculations.

Pump station monitoring is similar to weather monitoring except that it is "watching" your water instead of the weather. Remote monitoring of a pump station can give you the following information: water flow rate, air temperature, water pressure, pump status (off/on), and rainfall. The air temperature and rainfall readings use the same equipment as the weather station. The flow sensor and water pressure sensor are usually tapped into the main line. These sensors can also be installed on any water lines out in the field. The information is then relayed to a field satellite which can send the information back to the central.

As we all know, irrigation has become a much more sophisticated art. The value of these tools is that they can give us more information than we are used to getting, but at the same time make our jobs easier by giving us more time to spend on other areas of golf course maintenance.



ADAPT YOUR MANAGEMENT STYLE TO SUIT DIFFERENT SITUATIONS

For many years, management style was either autocratic or democratic. Autocrats gave orders and expected obedience; democratic managers gathered opinions and tried to involve employees in every major decision. Today, managers are recognizing different styles of leadership. Here are four:

Directive: Like the autocratic style, this technique relies on giving commands and control liking behavior. In the short term, a directive style can help you get things done quickly, and will be effective when you supervise employees with little job experience or knowledge.

Supportive: Employees who lack experience or self-confidence will respond better to this style, which emphasizes listening to people, praising performance, and facilitating personal interactions.

Coaching: Generally directive, this style allow increasing degrees of support for employees as they become more experienced and confident of their abilities.

OUR HOST FOR OCTOBER

Our host for the Institute at Mountain Springs, **Jim Smith**. Jim's Dad was a golf course construction Superintendent and built many courses including Sea Ranch Golf Links in 1977. Jim stayed as the Supt. until January 1989. He then came to Mountain Springs. The fairways are a blend of 40% bluegrass and 60% rye. The greens are Penncross and the tees are the same as the fairways. Mountain Springs was originally a cattle ranch turned golf course in April 1990. They are currently doing 240 rounds per day.

Our thanks to Jim, his wife Linell and all the staff at Mountain Springs for their Hospitality and making the Institute a success.

Delegating: Best when you work with experienced professionals who know what to do without supervision.

Of course, there is no "right" style of management. You must be able to recognize which employees will respond best to each style, and provide the kind of attention and leadership necessary to work effectively with each member of your staff.

From: Emergency Librarian, Seattle, WA



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