Frost, Freeze and Cold Weather Protection

Information and Preparation

Reliable weather information is especially crucial when severe weather and cold fronts approach the North Florida area.

Eddie Snipes, CGCS of the Oakbridge at Sawgrass Golf Course studies forecast maps in the local paper and watches one preferred TV meteorologist. Eddie also uses the toll-free number for N.O.A.A. Weather Radio to receive the latest forecast information. Gary Meadors, CGCS at the Jacksonville Beach Golf Club relies on the local TV and radio forecasts. I listen to N.O.A.A. and watch the Cable TV weather station.

All of us agreed that we stock up on wetting agents (surfactants) before winter and Eddie has a supply of tarps for plant protection. Gary and I do not use tarps or coverings as most of our plant material is cold tolerant. Eddie will cover his sago palms, banana trees and other sensitive plantings around the beach house. Many Florida golf resorts want the tropical atmosphere, but in some areas it is not very practical.

Plant material is not the only part of a golf course that needs protecting when hard freezes are upon us. Irrigation pump stations, controllers, water fountains, and restroom plumbing may all require attention.

Eddie and Gary have electric irrigation control systems, and I have a combination of electric controllers on the tees and greens and 20 hydraulic fairway controllers. In the winter we place rolled insulation in the control boxes. This has worked very well.

(Edited note: At Isleworth CC in Windermere, each controller had an electric receptacle in the box. Low wattage light bulbs were plugged in to serve as "heat lamps" in addition to exterior insulation.)

If extremely cold weather is expected, Eddie may drain his entire system to prevent pipe damage. Gary will insulate his pump station and/or place a heat lamp in the pump house. Other superintendents protect the exposed restroom plumbing on the course by either draining the lines or adding anti-freeze or alcohol to tanks and bowls to prevent freezing.

Protecting the Turf

All of us agreed on the use of wetting agents as the best preventive measure for turf protection. The wetting agent prevents dew from forming and helps eliminate frost damage.

By applying a wetting agent the day before a freeze, it should last for several days. The newer products can be applied more often without worry of phytotoxicity.

Years ago it was common irrigation practice to either "knock down" frost or even "ice-over" a green or tee to prevent below-freezing air from contacting the turf.

The technology on wetting agents, especially those that do not have to be watered in, is revolutionizing frost and freeze protection.

The use of powdered charcoal to absorb heat from the sun was a messy process that is losing popularity. Eddie said that many still try to achieve the same results by applying Milorganite, a black-grained organic fertilizer. Many times the best offense is a good defense. A good dose of potash applied in the late fall or early winter will help turf survive or recover from a freeze. If damage does occur, it may be wise to raise the height of cut on the greens and apply a good source of chelated iron.

Cold-weather damage is usually minimal because it rarely stays below freezing for extended periods. Frost damage on is not usually a factor on overseeded turf. Gary and I concurred that if frost is present on fairways a short syringe cycle may be necessary to thaw the ice crystals.

Any time you are forced to change the playing conditions or delay the opening of the course to play, the greens committee, the pro, and the members should be informed of the reasons for your actions.

Summary

Common sense is one of your best weapons. Be prepared. Stay on top of weather conditions. Keep lines of communication open. Remember! This is Florida! It can't stay cold for too long.