Dr. Daniel's Purr-wick System

This month's newsletter features two articles concerning turf renovation using Dr. Daniels Purr-wick System.

The first article, by Glenn Shields, discusses the field renovation taking place at D.C. Stadium while the second article by Bill Black at Fountainhead Country Club in Hagerstown, Maryland discusses living with the system. Bill wrote a good article on his reconstruction of this No. 1 tee for the U.S.G.A. Greens Section Record, May 1974.

D.C. Stadium
by Glenn Shields

As you may have read recently in the newspapers, there is much happening at the Robert Kennedy Memorial Stadium in Washington, D.C. I heard that a major reconstruction of the playing field was underway and took an afternoon in March to visit and look around. I was guided on this tour by Mr. Lawrence J. McKiernan, who is the Prescription Athletic Turf, Inc. the company which is reconstructing the field. Mr. McKiernan is superintendent in charge of installation and provided this explanation of how this new system will work.

Basically a means is being provided to totally control the amount of water held by the soil of the playing field and to draw off or add water to the soil beneath the turf as needed. The playing surface, an area 180' by 360' was excavated to a depth of 16". A vinyl plastic sheet was then spread over this area which will prevent the movement of water between the soil below and the special soil mix of the 16" depth playing surface. Agriflow drainage pipe was installed on top of the plastic sheet in a grid fashion of 2", 4" and 6" pipe which leads to a pumping station. Mason washed sand was then spread to a depth of 9" over the plastic sheet and drain pipes. Heating cables were then installed on one foot centers to prevent the playing field from freezing. These heat cables provide 5 watts of heat per square foot. Five additional inches of sand was placed on the heating cables to give a total depth of 15 inches of sand; graded to provide only a two inch crown. A 1/2xinch mixture of calcite clay, vermiculite and peat was placed on top of the sand. After raking in this mixture, the field was sodded to Warrens A-34 bluegrass.

The heart of the system lies in the pumping station. Through this elaborate network of pipes, valves and pumps, water may be pumped out of the field; or by reversing the flow, water may be forced back through the drainage pipes for irrigation. A glass sight tube allows visual inspection of the actual water level in the playing field. With this system there should be few problems with a soggy playing surface of infiltration of water through the soil profile.

This concept for athletic field construction was developed by Dr. Daniel at Purdue University. It reminds me of

(Continued on page 6)