

Treasure Coast "Tide"ings

By JAMES P. CALLAGHAN
Riomar Country Club

Drought Hits Treasure Coast Hard

All golf course superintendents along the Treasure Coast have had to cope with one of the worst droughts in recent memory. In fact, an official from the St. John's Water Management District stated that the recent drought had a return period of 200 years!

Most golf courses fared relatively well under the adverse conditions. Many areas received less than 40% of the rainfall expected from July '80 through June '81 and Vero Beach received only 7 inches of rain during the first six months of this year.

Golf courses located inland that have ample quality water supplies escaped the nightmare found along the coastal sections. Tom Burrows, superintendent of the Turtle Creek Club in Tequesta, reported that he had enough water to pull through "fairly well". Likewise, Bill Mangold of Crane Creek Golf and Raquet Club in Stuart said that he welcomes dry spells so that he can control water application himself because of his heavy soil conditions.

However, for those golf courses located on the barrier island or near the Indian River to the west, problems reached crisis proportions. Fear of losing wells to saltwater intrusion was beginning to cause sleepless nights. With the average need of 500,000 gallons of water per 18 holes per day, superintendents along the coast really had their hands tied when mandatory cutbacks were issued. And to add insult to injury, many courses lost their overtaxed irrigation pumps for extended periods of time.

In Indian River County, Adam Yurigan of the John's Island Club reported touch and go situations. Although he has access to effluent, its volume is cutback during the hot summer months as the population of the development thins out. Adam is able to supplement water from his shallow wells with water from a private well in Wabasso, some five miles to the west. He stated, "without that Wabasso well, we'd definitely be in a bind."

Just down the road a bit, Riomar Country Club has 18 two-inch shallow wells, all within 600 yds. of the Atlantic to the east and the Indian River to the west. Towards the end of June, they were discharging approximately half their normal total rate of 300,000 gallons per day and chloride concentration was up from 700 to over 1200 ppm.

Other superintendents in St. Lucie and Martin Counties had similar stories. Lonnie Stubbs of Sandpiper Bay reported a critical condition and that he had to divert water normally used on the Wilderness course to the Saints and Sinners

courses. Joe Snook, superintendent of Riverbend in Tequesta, stated he was having a difficult time because his daily allocation for water use was low to begin with as compared to other area golf courses.

Getting To The Root Of The Problem

Although we may not see another drought as severe as the one of '81 in our lifetime, many superintendents are going to implement measures to insure that their turf will hold up better during dry periods. Superintendents along the Treasure Coast are going to tackle the root of the problem — grass root that is. Deep, fibrous roots are the superintendent's insurance policy under drought conditions.

One basic way to stimulate root development is to make sure potassium levels are adequate in the soil. In talking with several area fertilizer representatives, there is a definite trend toward using blends with a percentage of potash equal to or exceeding that of nitrogen to increase root development.

Another measure that area superintendents have found effective is the use of wetting agents or surfactants. Because these materials break the surface tension of the water, they enable water to percolate into the soil effectively toward the root zone even under compacted or thatchy conditions. Some superintendents have reported that regular use of wetting agents reduces the volume of water needed to sustain turf, especially in problem areas, by 15-50%.

Reducing nematode populations is probably the priority item in our area to encourage better root development. With sugar sand being the primary soil base for golf courses along the Treasure coast, we are a vacation paradise for the little undesirable. Those golf courses in our location such as Turtle Creek and John's Island that inject for nematodes annually had the healthy turf to show off even during the hot periods in June and July. Superintendents who have been injecting in alternate years or even waiting to the third year are going to persuade their clubs' officials that annual injections should prove to be a step in the right direction.

Other measures mentioned to stimulate increased root development are increased aerification and increasing time in watering cycles but decreasing the number of cycles. These measures enable water to move down into the root zone and discourage shallow root formation.

The golf course superintendents along the Treasure Coast probably won't mind seeing a mild dry spell in the near future. They believe that they are taking appropriate measures and would like to see mother nature put them to the test. ■